

# The Mining Journal

## RAILWAY AND COMMERCIAL GAZETTE

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

[The MINING JOURNAL is Registered at the General Post Office as a Newspaper, and for Transmission Abroad.]

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LONDON, SATURDAY, NOVEMBER 6, 1875.

[WITH SUPPLEMENT.] PRICE SIXPENCE. PER ANNUM, BY POST, £1 4s.

**MR. JAMES H. CROFTS, STOCK AND SHARE BROKER,**  
No. 1, FINCH LANE, CORNHILL, LONDON, E.C.  
Established 1842.

Business transacted in all descriptions of MINING Stocks and Shares (British and Foreign), Consols, Banks, Bonds (Foreign and Colonial), Railways, Miscellaneous, Insurance, Assurance, Telegraph, Shipping, Canal, Gas, Water, and Dock Shares.

Business negotiated in Stocks and Shares not having a general market value. BUSINESS IN ALL COLLIERIES AND IRON SHARES, and in the principal WAGON and MANUFACTURING COMPANIES OF ENGLAND AND SCOTLAND.

Mr. J. H. CROFTS, having now established CORRESPONDING AGENCIES in all the CHIEF TOWNS of the United Kingdom, is prepared to deal in the various LOCAL Stocks and Shares at close market prices.

COTTON SPINNING SHARES Bought and Sold, including those of Oldham, Bury, Heywood, Darwen, Accrington, and neighbouring districts. This description of security can be purchased to pay the investor very fair interest upon outlay.

Accounts opened for the Fortnightly Settlement. Monthly and Daily Price Lists issued.

Bankers: City Bank, London; South Cornwall Bank, St. Austell.

**SPECIAL DEALINGS** in the following, or part:—50 Asheton, 16s. 3d.; 20 Bampfyde, 15s.; 20 Bog, 7s. 6d.; 10 Bilson, 210s.; 40 Chapel House, 24 3s. 9d.; 10 Cape Copper, 23s.; 10 Eberhardt, 23s.; 20 Emma, 22 6s. 3d.; 15 East Canadon, 21 18s. 9d.; 20 Exchequer, 11s. 9d.; 20 Flagstaff, 15s. 3d.; 10 Gt. Laxey, 21 10s.; 10 Hingston, 21 1s.; 10 Last Chance, 23s.; 5 Ladywell, 50s.; 50 Mynydd Iron, 21 1s. 3d.; 30 Marke Valley, 23 2s. 6d.; 80 Prince of Wales, 4s.; 50 Parys Mountain, 12s. 3d.; 15 Pateley Bridge, 23s.; 30 Pennerley, 200 Penstruthal, 11s. 3d.; 100 Plynlimmon, 7s.; 10 Providence, 23s.; 20 Richmond, 26 17s. 6d.; 10 Roman Gravel, 21 7s. 6d.; 30 South Condurow, 23s.; 25 Sweetland, 23s.; 10 Tankerville, 21 10s.; 20 Thorpe's Gable, 27 1s.; 10 Van, 22 1s.; 20 Van Consols, 25s.; 5 West Chiverton, 21 1s.; 20 West Tankerville, 21 1s.

**BUYER OF POSITIVE ASSURANCE SHARES.**  
\* Shares sold for forward delivery (one or two months) on deposit of 20 per cent. Business on hand in all the leading TIN, COPPER, and LEAD SHARES.

**EGYPTIAN AND TURKISH BONDS.—SPECIAL BUSINESS**  
and latest information. JAMES H. CROFTS, 1, FINCH LANE, LONDON.

**RAILWAYS.—SPECIAL BUSINESS.** Fortnightly accounts opened on receipt of the usual cover. JAMES H. CROFTS, 1, FINCH LANE, LONDON.

**BLACK ROCK COAL.—SPECIAL BUSINESS.** JAMES H. CROFTS, 1, FINCH LANE, LONDON.

**MR. W. H. BUMPUS, STOCK AND SHARE BROKER,**  
44, THREADNEEDLE STREET, LONDON, E.C.

Transacts business in MINING and COLLIERIES Shares of every description. English and Foreign Stocks, Colonial Government Bonds, Railways, Banks, and Miscellaneous Shares, and all Securities dealt in on the London Stock Exchange, for INVESTMENT or SPECULATION.

Purchases and Sales negotiated in Unmarketable Stocks and Shares. Speculative Accounts opened for the Fortnightly Settlement. References given and required when necessary.

A Stock and Share List forwarded to bona fide Investors free on application. Bankers: The National Provincial Bank of England, E.C.

**SPECIAL BUSINESS** in the undermentioned, at close market prices:—Asheton, Emma (Silver), Roman Gravel, Bog, Flagstaff, Richmond, Birdseye Creek, Frontino, South Condurow, Carn Brea, Gold Run, Sweetland Creek, Cape Copper, Javall, Tankerville, Cathedral (Copper), Ladywell, Tinoroff, Chapel House Colliery, Marke Valley, Van, Chicago (Silver), Pennerley, Van Consols, Dolcoath, Parys Mountain, West Chiverton, Don Pedro, Penstruthal, West Tankerville, Devon Consols, Pateley Bridge, Wheel Uny, Eberhardt, Port Phillip.

**FOR SALE, at prices annexed:—**  
40 Chapel House, 24 1s. 6d. 100 Plynlimmon, 7s.  
20 Colorado, 23s. 50 Last Chance, 11s. 6d. 100 Rookhope, 2s. 6d.

**IMPORTANT.**—Intending investors should lose no time in securing shares in well-selected mines at the low quotations now ruling, as an early and substantial advance may be confidently relied upon. Provided proper discrimination is exercised in the selection, there are, at present few, if any, other securities in the market which offer such a favourable field for investors, and considering the extremely low prices of the majority of shares in sound dividend and progressive mines, anyone investing now has the advantage of a minimum of risk, and will in all probability be enabled to realize handsome profits within a short period.

W. H. B. will be happy to furnish, on application, a list of shares which are likely to have an early rise in market value.

WILLIAM HENRY BUMPUS, SWORN BROKER.  
OFFICES—44, THREADNEEDLE STREET, LONDON, E.C.

**MESSRS. PYNE AND ASHMEAD,**  
CITY MINING AGENTS,  
LONDON MANAGEMENT OF COMPANIES UNDERTAKEN.  
ACCOUNTS AUDITED, LIQUIDATIONS CONDUCTED.  
6, BISHOPSGATE STREET WITHOUT, LONDON, E.C.

**FERDINAND R. KIRK, STOCKBROKER,**  
5, BIRCHIN LANE, E.C.

**SPECIAL BUSINESS** in—  
Alltani Colliery, Eberhardt, Anglo-Cable,  
Chapel House, Cardiff and Swansea, Direct Cable,  
Cape Copper, Richmond, Law's Chemical.

Consols, Foreign Bonds, Railways, and every security quoted on 'Change bought and sold. Clients giving the usual 'cover' can open accounts for the fortnightly settlement. References given when necessary in most of the leading towns of the United Kingdom.

**JOHN RISLEY (SWORN), STOCK AND SHARE BROKER,**  
77, CORNHILL, LONDON.

Business transacted at the following rates of commission:—Foreign Stocks, 1/4 per cent.; and Mining Shares of 24 each and upwards, 1 1/2 per cent.; under 24, 1s. per share.

**MESSRS. W. J. TALLENTIRE AND CO.,**  
STOCK AND SHARE BROKERS,  
20, CHANGE ALLEY, CORNHILL, LONDON, E.C.

Transact business in Stock Exchange Securities and Mining Shares of every description, either for immediate cash or the usual bi-monthly settlements, and also afford advice personally or by letter to executors, trustees, capitalists, and investors of every class in the selection of Securities for safe and profitable investment, their experience of the markets, extending over a period of more than sixteen years, together with special facilities for acquiring information, enabling them to act beneficially for clients.

They have established Corresponding Agencies in all the principal towns of the United Kingdom, and are prepared to deal in the various local Stocks and Shares at close prices. Orders per post or telegraph receive prompt attention.

Every Investor should read the October number of Messrs. W. J. TALLENTIRE and Co.'s Circular, which will be sent post free on application.

**MR. W. MARLBOROUGH, STOCK AND SHARE DEALER,**  
20, BISHOPSGATE STREET, LONDON, E.C. (Established 19 Years),  
can sell the following SHARES:—

40 Asheton, 16s. 3d. 50 Frontino, 23s. 9d. 80 Prince of Wales, 3s. 9d.  
20 Bog, 7s. 6d. 20 Gt. Laxey, 21 10s. 20 Pennerley, 200 Penstruthal, 11s. 3d.  
20 Birdseye, 21 1s. 3d. 20 Gold Run, 17s. 6d. 100 Plynlimmon, 7s. 9d.  
20 Cathedral, 25s. 20 Hingston, 21 1s. 3d. 50 Port Phillip, 15s.  
20 Chontales, 10s. 20 Javall, 14s. 6d. 20 Pateley Bridge, 23s.  
20 Chapel House, 24 3s. 9d. 20 Last Chance, 11s. 3d. 20 Parys Mountain, 12s. 3d.  
20 Colorado, 23s. 20 Marke Valley, 23 2s. 6d. 20 Sweetland, 23s.  
20 Don Pedro, 12s. 20 Old Trebuturg, 23s. 20 South Aurora, 7s. 9d.  
20 East Canadon, 21 18s. 9d. 20 Parys Mount, 12s. 3d. 20 St. Patrick, 27s. 6d.  
20 Emma, 22 6s. 3d. 20 Pateley Bridge, 23s. 20 Van Consols, 25s. 9d.  
20 Exchequer, 11s. 9d. 20 Pateley Bridge, 23s. 20 West Maria, c.p. 7s. 9d.  
20 Eberhardt, 23s. 20 Prince Patrick, 23s. 20 West Godolphin, 23s.  
20 Flagstaff, 15s. 3d. 20 West Tankerville, 21 1s.

An Offer Wanted for 100 Mining Association.

**LEAD MINES INVESTMENT.—**  
BUYER and SELLER of SHARES at MARKET PRICES, with advice as to PURCHASES and SALES, and information as to FUTURE PROSPECTS, &c.

P. WATSON, 79, OLD BROAD STREET, LONDON, E.C.

**INVESTMENTS IN STOCKS AND SHARES.—**  
BRITISH AND FOREIGN STOCKS and SHARES BOUGHT and SOLD.  
List of Prices and other information sent on application.

Bankers: The Alliance Bank (Limited), London.  
MR. P. WATSON, 79, OLD BROAD STREET, LONDON, E.C.  
(Close to Stock Exchange.)  
FINANCIAL OPERATIONS NEGOTIATED.

**MR. ALFRED E. COOKE, STOCK AND SHARE DEALER,**  
76, OLD BROAD STREET, LONDON.  
(Established 1853.)

Mr. COOKE is a BUYER and SELLER of the following SHARES at closest possible market price, free of commission:—

Bampfyde, Tankerville, Chapel House, Pateley Bridge, Tincroft, Devon Consols, Roman Gravel, Van, Eberhardt, Richmond, Van Consols, Javall, South Condurow, West Chiverton, Marke Valley, Tylwyd.

**SPECIAL BUSINESS** in the following:—Asheton, Cathedral, 26s. St. Patrick, 27s. 6d. Calmore Colliery, 25s. Gt. Laxey, 21 10s. Coldbeck Fells, 8s. 6d. Mynydd Gorddu, 23s.

**SPECULATION.**—Special and important advice on some leading British Railways. The November Circular will be forwarded to any address on receipt of stamp.

**MR. T. E. W. THOMAS, SHARE BROKER,**  
3, GREAT WINCHESTER STREET BUILDINGS, E.C.  
Established 1857.

The following are the latest prices at which business could be done. Where the difference between the buying and selling price is wide transactions may be effected at an intermediate price:—

Buyers.	Sellers.	Buyers.	Sellers.
Birdseye Creek, 1 1/2...	1 1/2	Port Phillip, 14s. ...	14s. ...
Bog, 6s. ...	7s.	Richmond, 2 1/2...	2 1/2
Don Pedro, 8s. ...	10s.	Roman Gravel, 12 1/2...	12 1/2
Eberhardt, 8 ...	8 1/2	St. Patrick, 27 1/2...	27 1/2
East Canadon, 1 1/2...	2	South Can Brea, 1 1/2...	1 1/2
East Lovell, 5 ...	5	South Condurow, 5 1/2...	5 1/2
Flagstaff, 14s. ...	14s.	So. Prince Patrick, 1 1/2...	1 1/2
Frontino, 1 1/2...	1 1/2	So. Roman Gravel, 5s. ...	5s. ...
Gaston, 10s. ...	10s.	Sweetland Creek, 2 1/2...	2 1/2
Gold Run, 15s. ...	15s.	Tankerville, 10 1/2...	10 1/2
Hingston Down, 12s. ...	12s.	Tincroft, 23 ...	23
Javall, 12s. ...	12s.	Van Consols, 25 ...	25
Marke Valley, 23 1/2...	23 1/2	Vinity Wood, 1 1/2...	1 1/2
New Quebrada, 3 1/2...	3 1/2	Van Consols, 25 ...	25
New Rosario, 5s. ...	5s.	West Chiverton, 1 1/2...	1 1/2
Parys Mountain, 11s. ...	11s.	West Maria (all pd.), 6s. ...	6s. ...
Pateley Bridge, 23 ...	23	West Seton, 90 ...	90
Pennerley, 20 ...	20	West Tankerville, 1 ...	1
Penstruthal, 11s. ...	11s.	Wheel Agar, 2 1/2...	2 1/2
Phylimmon, 7s. ...	7s.	Wheel Crebor, 2 1/2...	2 1/2
		Wheel Grenville, 3 1/2...	3 1/2
		Wh. Kitty (St. Agnes), 3 ...	3

**MR. W. L. WILKINSON, SHARE BROKER,**  
(LATE WARD AND LITTLEWOOD),  
CROSBY HOUSE,  
95, BISHOPSGATE STREET WITHIN, E.C.,  
STOCK AND SHARE BROKER.

**MR. E. J. BARTLETT, STOCK AND SHARE DEALER,**  
No. 30, GREAT ST. HELEN'S, LONDON, E.C. (Established 10 years),  
has SPECIAL BUSINESS in South Condurow, Prince Patrick, Wheel Kitty, Penhalla, and Chapel House Shares at close prices.

**G. E. SIMPSON, STOCK AND SHARE DEALER,**  
G. 6, GREAT WINCHESTER STREET BUILDINGS, LONDON, E.C., will  
SELL the following SHARES, free of commission:—

20 Birdseye, 21 1s. 3d. 20 E. Canadon, 21 18s. 9d. 50 Pateley Bridge, 23 1/2.  
20 Bog, 7s. 6d. 20 Frontino, 23s. 9d. 70 Pennerley, 200 Penstruthal, 11s. 3d.  
20 Chapel House, 24 3s. 9d. 20 Gt. Laxey, 21 10s. 20 Richmond, 26 17s. 6d.  
20 Cedar Creek, 16s. 3d. 100 Gold Run, 17s. 6d. 20 Roman Gravel, 21 1/2.  
20 Chontales, 11s. 3d. 70 Hingston, 21 1s. 3d. 20 St. Patrick, 27 1/2.  
20 Cape Copper, 23s. 6d. 20 Javall, 14s. 6d. 20 So. Condurow, 5 1/2.  
20 Devon Consols, 23 18s. 9d. 50 Ladywell, 50s. 20 Sweetland, 23s.  
20 Don Pedro, 12s. 3d. 30 Marke Valley, 23 2s. 6d. 20 Tankerville, 21 10s.  
20 Eberhardt, 23s. 75 Penstruthal, 11s. 3d. 15 Van, 22 1s.

**INVESTMENT OR SPECULATION.**  
**JOHN B. REYNOLDS, STOCK AND SHARE DEALER,**  
70 AND 71, BISHOPSGATE STREET WITHIN, LONDON, E.C.,  
Transacts business in Mining and Colliery Shares of every description. English and Foreign Stocks, Colonial Government Bonds, Railways, Banks, Telegraphs, Financial, and Miscellaneous Shares, and all Securities dealt in on the London Stock Exchange.

Every information furnished upon all British and Foreign Mining Companies, and a carefully selected List of the best Dividend and Progressive Shares forwarded post free upon application.

Railway Stocks should be selected with the greatest care, and investors should only act under the guidance of experienced judgment.

Bankers: London: City Bank. Cornwall: Trewedy, Williams, and Co. Established 18 Years.

**MESSRS. HARVEY, JORDAN, AND CO.**  
MINING ENGINEERS AND AGENTS, ACCOUNTANTS, AUDITORS,  
MANAGERS OF PUBLIC WORKS, &c.  
In connection with Messrs. TRAIL, FORSTER, and CO., Georgetown, Colorado.  
Mineral Properties Inspected.

LONDON OFFICES—30, MOORGATE STREET, E.C.  
THE PLANTRESSANT TIN PLATE WORKS.  
THE LLEANT SILVER MINING CO.

**MESSRS. A. ENDEAN, FISHER, AND CO., STOCK AND SHARE DEALERS,**  
3, LOMBARD COURT, LOMBARD STREET, E.C.  
Bankers: London and Westminster, Lothbury.

**MR. JAMES STOCKER, STOCK AND SHARE BROKER,**  
2, CROWN COURT, THREADNEEDLE STREET, LONDON, E.C.  
Bankers: London and Westminster.

Transactions in Railway Shares, Foreign Stocks, Bonds, Debenture, Bank, Telegraph, Insurance, and all Miscellaneous Stocks, either for cash or the fortnightly settlement, and accounts opened for same.

**SPECIAL BUSINESS** in the following British and Foreign Mines, Colliery, and other Shares:—25 Birdseye, 21 1s. 3d.; 5 Bilson and Crump, 21 10s.; 20 Bog, 7s. 6d.; 55 Cle Hill, 4s. 3d.; 40 Cathedral, 24s.; 30 Cedar Creek, 17s.; 30 Carn Brea, 10s.; 10 Chontales, 12s.; 50 Chapel House, 24 3s. 9d.; 20 Colorado, 23s.; 10 Cook's Kitchen, 60s.; 20 Don Pedro, 12s.; 20 Devon Consols, 23 18s. 9d.; 20 East Canadon, 21 18s. 9d.; 20 Emma, 22 6s. 3d.; 20 Eberhardt, 23s.; 20 Flagstaff, 15s. 3d.; 20 Frontino, 23s. 9d.; 20 Gt. Laxey, 21 10s.; 20 Grogrin, 22 1/2s.; 100 Gawton, 12s. 3d.; 60 Hingston, 21 1s. 3d.; 20 Hornachon, 21s.; 20 Javall, 14s.; 50 Kilbreth, 16s. 3d.; 20 Last Chance, 11s. 3d.; 45 Ladywell, 50s.; 100 Malabar, 3s. 6d.; 20 Marke Valley, 23 2s. 6d.; 30 New Consols, 27s. 6d.; 50 New Quebrada, 40s.; 40 Old Trebuturg, 23s.; 20 Pateley Bridge, 23s.; 60 Penstruthal, 10s. 6d.; 20 Pennerley, 31s.; 10 Port Nigel, 40s.; 20 Port Phillip, 15s. 3d.; 65 Plynlimmon, 7s.; 80 Parys Mountain, 11s. 9d.; 100 Prince of Wales, 3s. 6d.; 180 Positive Assurance, 14s. 6d.; 10 Richmond, 26s.; 120 Rica, 4s. 6d.; 40 Rookhope, 4s. 6d.; 25 Sweetland, 23s.; 75 South Aurora, 7s. 9d.; 30 South Can Brea, 50s.; 20 South Roman Gravel, 21 1/2s.; 20 Thorpe's Gable, 27 1s.; 20 Tincroft, 23s.; 5 Van, 22 1s.; 60 Van Consols, 25s.; 10 West Chiverton, 21 1s.; 20 West Maria, 6s.; 20 West Maria Andes, 6s.; 15 Wheel Kitty, 40s.; 20 West Tankerville, 21s. 3d.; 20 Wheel Grenville, 15s.; 15 Wheel Crebor, 23s.

Business transacted in Turkish, Egyptian, Peruvian, and Spanish Bonds.

**MR. CHARLES THOMAS,**  
MINING AGENT, STOCK AND SHARE DEALER,  
3, GREAT ST. HELEN'S, LONDON, E.C.

**WEST GODOLPHIN.**—Full particulars of this mine may be obtained on application. The shares are recommended for immediate investment or speculation.

CHARLES THOMAS, 3, GREAT ST. HELEN'S, LONDON, E.C.

**MESSRS. A. W. THOMAS AND CO.,**  
10, COLEMAN STREET, E.C.,  
MINING AGENTS, AND STOCK AND SHARE DEALERS.

"INVESTMENTS AND SPECULATIONS FOR 1875."  
Price Sixpence.

WHEAL GRENVILLE and WHEAL AGAR.—A. W. THOMAS and Co. are BUYERS of these shares. Sellers please state number and lowest price.

**SAFE DIVIDEND INVESTMENTS.**  
Dividends 5 to 10 and 12 per cent. per annum on outlay.

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Safe Investments in English and Foreign Railways, Preference and Debenture Stocks, Telegraph, Water Works, Gas, Dock, Insurance, Bank, Tramway, Shipping, Tea, Land, Mine, and Miscellaneous Shares, &c.; Foreign Loans, Bonds, &c.; Indian, American, and Colonial Stocks. Dividends, Reports, Market Prices, &c. CAPITALISTS, SHAREHOLDERS, EXECUTORS, INVESTORS, TRUSTEES, Should read the above Investment Circular. It is a Safe Guide to Investors.

Messrs. GOULD SHARP AND CO., 33, POULTRY, LONDON, E.C.  
Established 1852.—Bankers: London and Westminster, Lothbury, London, E.C.

**HENRY CAMERON AND CO., STOCK AND SHARE BROKERS**  
AND DEALERS, 36, NEW BROAD STREET, LONDON, E.C.  
Have SPECIAL BUSINESS in Sound Dividend-paying Cotton Manufacturing and Spinning Companies. Also, in non-risky Mining Shares—as Chicago Silver, Gold Run, and other sure Mines.

Cameron's "Investment Gazette" sent on receipt of three stamps.

**MR. THOMAS THOMPSON, JUN., 1, PALMERSTON BUILDINGS, BISHOPSGATE STREET, LONDON, E.C.**  
Some valuable hints as to the purchase of mining shares will be found in Mr. Thompson's "Investment Circular" for Nov. now ready, post free, price 6d.

**MR. W. TREGELLAS, 122, BISHOPSGATE STREET WITHIN, E.C.,**  
Deals in all descriptions of Stocks and Shares at close market prices.

**MESSRS. HARLAND AND CO., STOCK AND SHARE DEALERS,**  
235 and 236, GRESHAM HOUSE, OLD BROAD STREET, LONDON, E.C.  
Bankers: London and County Bank.

Messrs. H. and Co. have Special Business in Chapel House and Alltani Collieries Shares, also in the shares of the Oregon Gold, and the Patent Ligno Mineral Paving Companies, and will be happy to give full particulars of the above desirable investments on application.

Dealings at closest market prices in all kinds of Stocks and Shares.

**MESSRS. ENDEAN AND CO., STOCK AND SHARE DEALERS,**  
85, GRACECHURCH STREET, LONDON, E.C.  
Government and every negotiable Stock dealt in for cash or account. Orders and telegrams punctually attended to.

**MESSRS. J. TAYLOR AND CO., 86, LONDON WALL, E.C.,**  
and MINING EXCHANGE, SOUTH KING STREET, MANCHESTER,  
MINING ENGINEERS AND INSPECTORS.  
Business done in all descriptions of Stocks and Shares.

**MESSRS. VOSPER AND CO., 48, FINSBURY CIRCUS, E.C.,**  
GENERAL MINING AND AGENTS, have on SALE FREEHOLD and LEASEHOLD PROPERTIES, on terms which will afford fair interest and good security; MINERAL PROPERTIES, consisting of China-Clay, Copper, Coal, and Lead Mines.

They have also SPECIAL BUSINESS in GREAT PANT-Y-PYDEW CONSOLIDATED LEAD and other Progressive Mines.

N.B.—The Purchase of Land is no speculation.

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A FEW FULLY PAID-UP SHARES, of 25 each, in the above mine, TO BE SOLD at a discount for cash.

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STOCK AND SHARE BROKERS,  
32, OXFORD STREET, AND 88, PORTLAND STREET, MANCHESTER.

**MR. R. PERCY ROBERTS,**  
FINANCIAL AGENT,  
60, ENGLISH STREET, CARLISLE.

**MESSRS. J. M. LAWRENSEN AND CO.,**  
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Only maker in the United Kingdom.



In consequence of the UNFOUNDED ATTACKS made on the KEOKUK AND KANSAS CITY RAILWAY by the *Times*, and their REFUSAL to ADMIT a REPLY to the same, the said REPLY has been inserted, as an Advertisement, in TWO HUNDRED London and Provincial Papers. It can also be obtained as a LEAFLET from all Agents of the CO-OPERATIVE CREDIT BANK. Special attention is drawn to this answer; and in order to give the public full time to digest it the LISTS WILL BE KEPT OPEN until FRIDAY, the 12th inst., for LONDON, and SATURDAY, the 13th inst., for the COUNTRY.

ISSUED AND STRONGLY RECOMMENDED BY THE CO-OPERATIVE CREDIT BANK.

# Keokuk and Kansas City Railway Company of Missouri, UNITED STATES OF AMERICA.

## FIRST MORTGAGE SINKING FUND BONDS.

Issue of £500,000 sterling—\$2,500,000 American Gold, being part of £1,000,000 sterling, or \$5,000,000 American Gold, authorised to be issued in accordance with the Charter and resolutions of the Board of Directors. Bearing interest at the rate of 7 per cent. per annum payable half-yearly, but yielding at the price of issue 8 per cent. annually. Interest and principal payable in London, at the Co-operative Credit Bank, in sterling, or in New York City (U.S.A.), at the office of the Farmers' Loan and Trust Company, in American Gold, free from all United States or State Taxes. The Bonds are to bearer or registered of various denominations as under, repayable at par A.D. 1905.

DENOMINATIONS OF BONDS.		PRICE OF ISSUE PER BOND.	
Class A, \$1000 American Gold	= £200 0 0 sterling.	Class A, \$875 American Gold	= £175 0 0 sterling.
Class B, \$500 "	" = 100 0 0 "	Class B, \$437-50 "	" = 87 10 0 "
Class C, \$250 "	" = 50 0 0 "	Class C, \$218-75 "	" = 43 15 0 "
Class D, \$100 "	" = 20 0 0 "	Class D, \$87-50 "	" = 17 10 0 "
Class E, \$25 "	" = 5 0 0 "	Class E, \$21-88 "	" = 4 7 6 "

A bonus of 20 per cent. in full paid ordinary shares of the Railway Company will be allotted to subscribers after the final payment, on the issue of the Definitive Bonds.

### TRUSTEES UNDER THE MORTGAGE.

FARMERS' LOAN AND TRUST COMPANY OF NEW YORK (U.S.A.).  
ENGLAND.

PRESIDENT—SAMUEL H. MELVIN, Esq., Springfield, Ill.

VICE-PRESIDENT—A. C. VANDEWATER, Esq., Pana., Ill.

### DIRECTORS.

SAMUEL H. MELVIN, Esq., Springfield, Ill.  
HOWARD M. HOLDEN, President First National Bank, Kansas City (Missouri).  
WILLIAM PATTERSON, Esq., President Keokuk National Bank, Keokuk (Iowa).  
WILLIAM H. WATERS, Esq., President Second National Bank, St. Louis (Missouri).  
JOHN H. CARDELL, Esq., Cashier Saline County Bank, Marshall (Missouri).  
GEORGE H. REA, Esq., President Mississippi Valley Transportation Company, St. Louis (Missouri).

JOHN W. MORSE, Esq., General Agent, Indianapolis and St. Louis Railroad Company, St. Louis (Missouri).  
General F. A. JONES, formerly United States Army, Macon (Missouri).  
A. C. VANDEWATER, Esq., Pana. (Illinois).  
GEORGE P. LAURENCE, Esq., Pana. (Illinois).  
\* Esq., England.  
\* Esq., England.  
\* Esq., England.

\* To be elected by the Bondholders at a meeting to be called for that purpose after Subscription and Allotment.

SOLICITOR—CHARLES HENRY EDMANDS, Esq., 33, Poultry, London, E.C.

ENGINEER-IN-CHIEF—OSWALD YOUNGHUSBAND, Esq., M.Inst.C.E.

BANKERS—THE CO-OPERATIVE CREDIT BANK, Mansion House Chambers, 11, Queen Victoria-street, London, E.C., and all its branches throughout Great Britain and Ireland.

THE CO-OPERATIVE CREDIT BANK is authorised by the Keokuk and Kansas City Railway Company to receive subscriptions for £500,000 sterling, in bonds of various denominations, as above, said £500,000 being the first portion of an authorised issue of £1,000,000 sterling, which is now for the first time offered to the public.

The terms of payment are—

- 20 per cent. on application.
- 10 per cent. on allotment.
- 10 per cent. Dec. 1, 1875.
- 10 per cent. Jan. 3, 1876.
- 10 per cent. Feb. 1, 1876.
- 10 per cent. March 1, 1876.
- 10 per cent. April 1, 1876.
- 20 per cent. May 2, 1876.

Subscribers will have the option of pre-paying in full under discount at the rate of 6 per cent. per annum, either on allotment or on any of the dates when an instalment falls due. The failure to pay duly any instalment will subject all previous payments to forfeiture and cancellation of the allotment.

Scrip certificates will be issued against allotment letters and the bankers' receipts, and after payment of the final instalment will be exchanged for the definitive bonds in due course.

Special attention is drawn to the fact that a bonus of 20 per cent. of their holdings, in full-paid ordinary shares of the Keokuk and Kansas City Railway Company, will be allotted to subscribers on the payment of the final instalment and the issue of the definitive bonds. It is calculated that this ordinary share capital will within four years from completion of the road be earning a dividend of at least 4 per cent. annually. For subscribers to bonds of a lower denomination than £100 it has been arranged that inasmuch as the share capital cannot be subdivided, according to the charter, into a lower denomination than \$100, a new plan shall be carried out to secure for them a similar interest in the 20 per cent. bonus. This arrangement is that the balance after allotment, made to the holders of larger bonds, shall be placed in the hands of trustees; against which numbered coupon tickets will be issued in proportion to the amount of

the lower bonds, as, for instance, one to each holder of a £5 bond, four to a holder of a £20 bond, and so forth. Within one month after the final payment on such smaller bonds (i.e., those below £100) a drawing will take place in the presence of a notary public for such a number of \$100 shares as will represent the proportion of said bonus of \$100 share to £100 worth of bonds held in sums under the said sum of £100, in which one coupon will have a chance of being drawn for a \$100 share.

The bonds now offered will form a first charge on a main line of road 225 miles in length, extending from Keokuk (Iowa) to Kansas City (Missouri), the latter terminus being, as is well known, the great commercial centre of the South-West. There has been expended already on the property \$1,170,239, or, in round numbers, £200,000, on the section or division between Salisbury and Kansas City (107 miles in length, exclusive of sidings); 15½ miles between Glasgow and Salisbury are already in operation, and about 20 miles more are so far advanced in respect to the earthworks and bridges that they can be completed ready for the permanent way at a very moderate outlay.

A special provision of the mortgage is that the railway company bind themselves to use their best endeavours to procure at the next session of the Legislature of Missouri such additional powers as will confer on the bondholders the right to vote at all elections equally with the shareholders. In the meantime it has been agreed that the bondholders shall have at once the nomination of three English directors, and thus be guaranteed a direct voice in the management. It will be evident to bondholders that by securing this voting power the management is practically vested in them, as having in connection with the stock bonus above mentioned a majority of votes.

An English trustee will be appointed to guard the interests of the English bondholders.

No disbursement of the money subscribed will be made either to the railway company or the contractors, except on the certificate of an engineer appointed by the bondholders that five consecutive new miles of railway are completed according to specification, and are in running order for trains, and so from time to time as every successive five miles of new railway are

completed, the contract being specific that no payment shall in any case be made except as and when every five miles are completed.

The completed and projected line of the Keokuk and Kansas City Railway has been very carefully examined by Mr. Oswald Younghusband, M.Inst.C.E. His report demonstrates that the proceeds of the bonds will be amply sufficient for the completion and full equipment of the division between Salisbury and Kansas City; that in consequence of its judicious location it can be worked at a very moderate cost; and that through opening up a richly-settled agricultural and mineral section of the State of Missouri the net receipts from the traffic will be amply sufficient on completion of the road to pay the interest on the debentures.

Provision has been made by the railway company for depositing with trustees two years' interest in advance on the bonds, so that there may be no possibility of default during the construction of the road. These trustees are two in number, and have been appointed conjointly in the interests of the bank and the railway company. Every precaution has been taken to guard against those abuses which, unfortunately, have in some cases cast discredit on American railroad investments.

The legal documents connected with the company can be seen at the office of C. H. Edmands, Esq., solicitor, 33, Poultry, London, E.C.

Copies of the engineer's report and of the mortgage, or Deed of Trust, as settled by J. P. Benjamin, Esq., Q.C., together with prospectuses and forms of application, can be obtained at the chief office of the Co-operative Credit Bank, 11, Queen Victoria-street, London, E.C., or at its various branches throughout Great Britain and Ireland.

Subscription lists will be opened on October 30 at the Co-operative Credit Bank in London and at its various branches. These lists will be closed for London on November 8, and for the country on November 9.

Applications must be made on the following form, and must in all cases be accompanied by a deposit of 20 per cent., which will be returned without deduction should there be no allotment.

## FORM OF APPLICATION.

TO BE RETAINED BY THE BANK.

ISSUE OF £500,000—\$2,500,000—PART OF £1,000,000, OR \$5,000,000, FIRST MORTGAGE SINKING FUND BONDS OF THE

## KEOKUK AND KANSAS CITY RAILWAY COMPANY.

Redeemable in Thirty Years from October 1st, 1875. Principal and Interest at the rate of 7 per cent. per annum, payable in Gold.  
In Bonds of A £200, B £100, C £50, D £20, E £5.

TO THE DIRECTORS OF THE KEOKUK AND KANSAS CITY RAILWAY COMPANY, LONDON, E.C.

Having paid to your credit with the CO-OPERATIVE CREDIT BANK the sum of £  
issued by you, dated October 30th, 1875, Bonds of the above-mentioned issue, Class , and hereby agree to accept the same or any smaller number that may be allotted to , on the conditions of the Prospectus  
and to pay the additional instalments thereon as they may become due from time to time, and in default of due payment on any instalment agree that allotment and all previous payments shall be liable to forfeiture.

Name in full .....  
Address .....  
Date .....  
Signature of Applicant .....

desire to pay up

ADDITION TO BE FILLED UP IF THE APPLICANT DESIRES TO PAY IN FULL.

subscription in full, discount at the rate of 6 per cent. thereon to be allowed for the intervening period.

Signature.....

### RECEIPT (TO BE RETAINED BY THE APPLICANT).

Received of the sum of £  
required on application for the allotment of Bonds, Class .  
for account of the Keokuk and Kansas City Railway Company, being the payment of deposit of £20 per cent. per Bond,  
£ : : For the Co-operative Credit Bank..... Manager.

N.B.—Similar receipts will be issued to Subscribers on the payment of each instalment as it becomes due, said receipts to be exchanged as soon as possible after the final payment for the definite Bonds.



## Original Correspondence.

## THE CHANNEL SUBMARINE TUBULAR BRIDGE.

That advantage would result from connecting England and France by railway communication is now considered certain by a large number of persons on both sides of the Channel, although great diversity of opinion exists as to the method by which such communication should be established. A tunnel, a bridge, and a monster railway, capable of carrying entire trains from shore to shore without stopping the carriages, have each their advocates, and Mr. PETER BARLOW, F.R.S. (who has had, perhaps, more experience than any man living in the construction of sub-aqueous communication, since he was the author of the Tower Subway project in connection with which he has actually made a long tunnel under the Thames from Tower Hill to Horselydown, without letting in, as expected, a drop of the water of the Thames), now puts forward a modification of the suggestion originally made by Mr. John de la Haye, in the columns of the *Mining Journal*, for a tubular communication which its modified form becomes a submarine tubular bridge. The proposition is the more worthy of consideration because Mr. Barlow has no patent or company to promote, and writes only in the cause of science. He believes tunnelling under the sea to be a mistake, and this opinion will, without any doubt, be ultimately verified, although the verification may not come until it is too late for capitalists sufficiently credulous to risk their money to escape the inevitable loss which must result. The submerged tube has, moreover, the immense advantage over all the tunnelling projects that the construction of 50 or more sections of the tube can be going on simultaneously, whilst but two pares of men could work at the same time in the tunnel; and it is this that renders the completion of the tube within a year possible.

The task of demonstrating the practicability of laying a double tube of steel or iron, or a submarine tubular bridge, across the Channel from Dover to Calais appears at first sight an extremely difficult one, yet after carefully considering Mr. Barlow's pamphlet very different conclusion seems justifiable. He states that his attention has been recently called to the subject of completing railway communication under the sea, from having had to report upon the practicability of such a connection at the city of Rio de Janeiro. With regard to the various schemes which have been brought forward, Mr. Barlow is of opinion that they are generally practicable, but that they involve so much time and cost that the capital cannot readily be found for their execution. This question of cost is of the most possible importance, and in connection with it there is one which must not be lost sight of. In all calculations of expenditure and returns which have hitherto been made it has been assumed not only that the amount of trans-Channel traffic would increase many fold if the tunnel were constructed, but likewise that the whole of the increased traffic would go by that route, although the difference in time of a journey from England to any continental port would only be shortened by one hour, and that at the expense of half-an-hour's sojourn in an atmosphere so unwholesome as to be likely to have a most prejudicial effect upon the health of those submitting to it. From the large sectional area of the Thames Tunnel as compared with its length the inconvenience of bad ventilation was not felt, but in the Tower Subway, in which the relation of sectional area to length would still be vastly greater than in the Channel Tunnel, the conditions are more nearly similar, and here ventilation is very far from good. It is, of course, well known that greater lengths of airway than 20 or 30 miles are kept fairly ventilated in many of the larger collieries, but when the airway is charged from that of a horse level to that of a railway tunnel the difference is widely different, especially as in the Channel Tunnel the augmentation of the number of shafts would be altogether impracticable. By the mode of construction which Mr. Barlow proposes, he anticipates that if his views be correct two substantial and durable tunnels may be laid down for much less than any of the previous estimates, and within 12 months from the time the contract is made. The plan proposed is to make the tube of elastic iron, or steel plates riveted together, surrounded and protected by 2 ft. 3 in. of brickwork (which, as the required deflection is but  $\frac{1}{4}$  in. in 100 ft., could be conveniently used) laid in asphalt, and beyond this by 6 in. of plank, well caulked and secured by rings of copper, or by copper cylinder. Such a tube, he remarks, would float in the water, and would require some further loading to cause it to sink to the bottom. Thus, it might be constructed at shipbuilders' yards in lengths of about 300 ft., and towed to the proposed line of airway. These lengths may be joined together by a floating iron girder or dry dock. The whole tunnel may be laid in a few weeks when the requisite lengths are complete, and the time required to execute a double tunnel from France to England will depend upon the rate at which the steel and other materials can be supplied; and Mr. Barlow is informed that such a supply of steel and other materials can be obtained, with continental assistance, in a year. He has, therefore, assumed one year as the time necessary to complete this work. He points out that the tunnel, being constructed of steel, is so elastic that the portion completed may be raised and laid on the bottom of the sea while the upper part is being fitted together on the surface of the sea, but it is not necessary that it should be laid on the bottom of the sea, as it may be suspended and anchored out of reach of shipping at 25 ft. below the surface, in which case the deflection of the tube will be a matter of less difficulty. When the tube is deflected from 70 ft. below the high water to the surface level of the sea, the extension produced by the curve is 1-3000th of the length, and the weight required to produce the deflection is only  $\frac{1}{4}$  tons, the tube not exceeding 3 tons per inch. If a more elastic metal than wrought-iron is used, the weight required for bending will, of course, be less, but there are no direct experiments except as to wrought-iron from which to estimate. The dimensions and mode of laying must not be referred to; they would readily be made to suit the circumstances of the case, and would present no insuperable difficulty. The idea of mounting the tube on piers is unquestionably bad, as it would give a merely imaginary advantage in exchange for permanent stability of the tube. All who have carefully studied the nature of the currents and undercurrents existing in the Channel will, probably, admit that the stability of the whole structure can only be hoped for by taking advantage of the natural forces. It has been demonstrated more than a century since that there is an enormous concentration of force in the narrow strait which separates Dover from Calais, and that the prevailing motion is from east to west, the waves having a great tendency when acting in that direction to carry all before them; it is not unreasonable, then, to suppose that even such a structure as that proposed by Mr. Barlow, if suspended in midwater be broken up like a tobacco-pipe by the very forces which in times long past created the very strait through which it is now proposed to make a dry communication. The sand and shingle of the Channel bed constantly moving from east to west could, by laying the tube upon the bottom, be to a great extent utilised to neutralise the forces to which the tube would be exposed. Were the tube laid fairly upon the bottom, and staid on the eastern side only with powerful buttresses, constructed with the same quantity of material which would otherwise be used for piers, the structure would gradually increase in stability instead of diminishing; the sand and shingle coming from the west would rapidly pack against the tube, and forming along its entire length a bank with what may be termed an ogee surface would thenceforth be a paramount protection to the tube by aiding further arrivals of shingle, &c., to ride over it without damaging it. As Mr. Barlow distinctly states that he has not yet formed any definite opinion with regard to the suspension of the tube, it will be well for him to reconsider the whole matter in connection with the question of the Channel currents, and every facility will be given to him for making known his views and conclusions through the *Mining Journal*.

As compared with the masonry tunnel the tubes proposed by Mr. Barlow have undoubtedly advantages, as will readily be understood from the briefest considerations of the four leading recommendations of the tubular system to which he alludes—as compared with a

masonry tunnel the depth below high water will be reduced one-half, with a corresponding improvement in gradient; the length of the tunnel will be reduced hereby one-third, the time of execution will be reduced probably to one-tenth, and the cost will be importantly reduced, but detailed calculations are not yet prepared. To this may be added that in carrying out any such projects as Mr. Barlow's the money expended would produce equivalent benefit to various branches of industry both in England and on the Continent, whilst in the case of a masonry tunnel the larger proportion of the money would be irretrievably sunk, the comparatively small advantage derived by the public falling into the hands of but few individuals, and doing little or no good to the working classes. Mr. Barlow has said enough to show that the difficulties of laying a pair of tubes across the Channel are not insuperable, and the tubular system is certainly more likely than any other system of tunnelling to prove commercially successful.

## MINING NEWS OF THE WEEK.

Messrs. F. W. MANSELL and Co. (Sworn Stock and Share Brokers), Pinner's Hall, Old Broad-street, write to us as follows:—

**HYDRAULIC GOLD MINING.**—Following the remarks hitherto made, we may now state that already chasms of 1000 ft. vertical depth are successfully crossed by high iron pipes, to convey water to isolated points. The practical test has proved that air can never collect at the lowest point of the inverted syphon, the point where the greatest pressure of water results. Uncalled for as this remark may seem, it must be excused, for the reason that men of good sense and some engineering capacity expressed fear that air would be carried down with the water to the lowest point of the pipe or syphon and collect there finally to a great extent under the pressure of two immense columns of water, and might explode at any moment as in an over-charged air-gun. This question was decided like the dispute about the weight or no weight of the fish in water, not by philosophy but by practical experiment, and the only question in the conveyance of water through pipes is that of sufficient strength of pipe to stand the pressure of the water, be the vertical height 500 or 5000 feet. Thus the field for hydraulic operations is immensely enlarged; almost all gravel deposits are accessible no matter at what elevation they are found, and the production of gold will keep pace with the development of other great industries of the country.

**BLUE TENT CONSOLIDATED HYDRAULIC GOLD MINE.**—It was omitted to be mentioned last week that the South Yuba claim, where the last run of 90 hours gave such large produce, is being brought into active and remunerative development by an extension of the bed-rock tunnel. This claim was originally worked through this tunnel, which was then run in 150 ft. on grade, then raised to a high angle 38 ft., and again extended 90 ft. further on an incline. The arrangements for its working are good, and have produced satisfactory results. The work now in progress will enable this claim to be continued successfully for many years. By extending the bed-rock tunnel 220 ft. in from the lower grade it will reach the face of the bank at the back of the present pit, 58 ft. below the surface of the bed-rock, thus providing an outlet for a large extent of gravel. Through this extended tunnel a large area of property can be mined to bed-rock to great advantage. There is an average fall of 60 ft. perpendicular between each flume, affording unsurpassed facilities for grinding and pulverising gravel and cement and saving gold. In one clean-up of over \$5000 only \$15 were found in the lower flume, showing how nearly all the value was saved in the sluices above. The South Yuba claim has already yielded gold to the value of \$60,000; the Gopher claim has yielded \$275,000; the Darst, \$160,000; the Enterprise, \$175,000; the Empire, \$50,000; and the Blue Lead and Bed-Rock claims, \$50,000. The total gross yield from the company's claims have been up to the present time \$770,000. The expenses are estimated at one-fourth of the gross returns. To obtain this amount not more than about 23 acres have been worked over superficially, and 2 acres (in the Gopher claim) have been worked to the bed-rock, whereas the company owns 490 acres of auriferous gravel, computed to contain gold of the gross value of nearly \$60,000,000 (12,000,000%); from this has to be deducted 25 per cent. for cost of working.

**OREGON HYDRAULIC.**—We purpose giving some further particulars about this property, which is immediately to commence its operations. The area of auriferous gravel is of no less extent than 588 acres, and the company intend at once to work a considerable portion of this gravel by washing simultaneously on what has been called the Reed claim and on the Thoss claim, both of which have produced a considerable quantity of gold, though worked in an irregular and rough fashion by the former owners. During the winter and spring months about 2000 or 2500 in. of water will be available for the claims, and careful examination this autumn warrants the statement made in the first report on the property—that the company would also have water during the driest months of the year. Though the company is not following out exactly the plan of operations recommended by Mr. Powers (of Birdseye Creek), which was to fit up sections 1 and 2, because further investigation showed that at a small expense a good head of water could be made available to wash the Thoss gravel. We see no reason why satisfactory results should not equally follow, for the gravel on the Thoss claim has been also tested throughout, and proved to be rich. It should be mentioned that there is \$25,000 payable out of profits to the vendors, and that the ordinary share capital is not entitled to receive any dividend until the amounts paid on the preference shares have been paid back in full, when claims of shares rank alike.

**RICHMOND CONSOLIDATED.**—Last week's *Journal* contained a communication, signed "A Shareholder," calling for some authority for our statement that "ore bodies of this kind are generally richer in massive limestone." Our authority is none other than Mr. Clarence King, who says, "The ore bodies occupy the shattered shaley limestone zone, bounded by the quartzite below and more massive limestone above." As must inevitably be the case with all similar deposits, the walls of the vein are, more or less, irregular and undulating, the included ore mass pinching or widening in accord with the accidents of pressure and metamorphism—hence the remarkable changes in dip and thickness. The presence of quartzite should not be regarded unfavourably, although indicating eventually a change from smelting to milling ore. Quartzite is but a slip remove from the ordinary sandstone, and the semi-fusion of its component grains shows at once that it is a sandstone which has been indurated either by the action of heat alone or of heat and water. It is in quartzite that are found the enormous ore bodies of the Comstock, and should it become necessary at Richmond (as seems likely) to erect mill machinery in lieu of furnaces it may be safely presumed that the reserves of smelting ore will prove sufficient to keep the furnaces fully employed during the whole period of transition. In such a case greater permanence and productiveness, if not increased richness, would be the primal feature of the Richmond Mine.

**EBERHARDT AND AURORA.**—When penning our remarks last week in reference to this property, and directing favourable attention to it, we had scarcely looked for a profit so great as 13,428% from a 40-days run. The latest advices are the most satisfactory. Apart from the debentures (a very small amount) the capital is 235,000%, and the current rate of profit is not less than 100,000% per annum. Taking the shares at present market price, the property is selling at an aggregate of 211,500%. The first shipment of bar-silver, value 7500%, is to hand.

**PATELRY BRIDGE LEAD MINES AND SMELTING WORKS.**—One of the important features in this group is the fact that while other mines of the district are unable to work for a portion of the winter months, or subject themselves to a heavy expenditure for steam-pumping machinery, a series of lodes in the eastern section of the company's property, which has afforded profitable working in the upper levels for more than a century, is drained by the Eagle level to a depth of 60 fms. below all the former workings. In no instance are the lodes other than rich in the bottom of the levels, thus proving the continuance of the courses of ore, and there are abundant reasons to conclude that in this part alone there is a profitable existence in at least as long in the future as there has been in the past. Again, in the cross-cut at the 20, in the western mine, there are three important lodes to intersect, leaving 20 fms. of backs unwrought, all of which

have been rich in the level above; these will be intersected in the course of a few weeks. There is also the main driftage at the 50, on a lode 5 to 6 ft. in width, going into whole ground, where nothing has been taken away above; this is a point of considerable promise for further important discoveries at an early date.

**ARGENTINE GOLD.**—The great success resulting from the operations at the St. John del Rey Mines is stimulating the development of similar formations in other regions. With ore that yielded an average of (say) 1 oz. of gold per ton, with large expenditure, St. John del Rey earned last year a net revenue equal to 40 per cent. per annum upon its capital; its present profits represent something like 50 per cent. per annum. The capital of the St. John del Rey is 253,000%; the capital of the Argentine Company is 60,000%; and, according to the practical testimony of Mr. Holman and Captain N. Coward, the average gold contents of the ore is more than 2 ozs. per ton. The St. John del Rey ore has to be raised from a depth of nearly 300 fms.—that from the Piqué Mine (the property of the Argentine Company) only 50 fms.; so that, while the ore itself is on an average 100 per cent. richer, the cost of extraction should be at least 100 per cent. less. The reserves of ore at Piqué are already estimated to be worth 300,000%. The machinery now erected is ample for every requirement; 100 heads of stamps can be kept at full work. The Argentine Company promises the direct advantage of an expenditure of over 100,000%, and many years in point of time. This property will be more fully referred to next week.

## AMERICAN RAILWAY ENTERPRISE AND ENGLISH CAPITALISTS.

Some adverse and apparently unjustifiable criticisms having been put forward with regard to the KEOKUK AND KANSAS CITY RAILWAY COMPANY, a very complete answer has been forwarded to us by Mr. E. Vernon, who is acting in this country for the company in question under the necessary power of attorney. Although it is probably going a little too far to state that the criticisms have been "impudently framed to mislead the public, and wilfully misrepresent facts," some allowance must be made for the strong language used by Mr. Vernon in his reply when it is considered that the facts which he mentions therein prove, to use the mildest terms, that the critic was not entirely unbiased in his criticism, and that he was undoubtedly too imperfectly acquainted with the subject upon which he wrote for his assertions to be of any real value to those whom he attempted to guide. That there have been some American railway projects brought forward upon the English market which would justify any amount of ill-natured remarks concerning them is as well known to the public as to the gentleman whose criticism is now impugned; but as a rule American railway securities have proved satisfactory as investments to English capitalists, and the Keokuk and Kansas City Railway certainly appears to be exceedingly unlike any "of the undertakings that have brought American railways into such disgrace in this country."

It is a series of such damaging insinuations that Mr. Vernon has had to reply to, that it is but common fairness that he should be permitted to answer them categorically. He complains, and not without justice, that the critic is not candid enough to state that every precaution has been taken in this particular case, and for the first time in this country, to guard against the repetition of mismanagement or misappropriation of funds which have heretofore cast discredit upon American railroad enterprises. He complains that the critic does not tell his readers, as any impartial critic could have done, that if the money is subscribed, and it is confidently believed that it will be, none of that money will be paid over to the railway company or to the contractors, except as five consecutive miles of road are completed and a certificate thereof furnished by an English-engineer-in-chief, appointed on behalf of the bondholders, that the financial supervision of all moneys invested in the undertaking will practically be controlled by the English trustee appointed by the subscribers; and, finally, that the gentlemen connected with the Keokuk and Kansas City Railway Company have made definite arrangements for depositing two years' interest on the bonds in the hands of trustees, with the view of protecting investors against any possibility of default in interest during the construction of the line and until its earning capabilities are developed. Of course the publication of these particulars in the same paragraph which contained the adverse comments would have tended to modify the reader's views with regard to the character of the project.

The truthfulness of the engineer's report is admitted, yet the statements made therein are repeated in such a garbled form that the idea is created that it is an unfavourable, instead of a favourable, report. Mr. Vernon explains, as the prospectus had, that the bonds will form a first charge on 225 miles of railway, and that the 500,000% now asked for will not be secured merely on an expenditure already made of, in round numbers, 200,000%, but it will be the first charge when the railway is built on a property which will have cost \$2,840,327 (568,065%), and the earning abilities of which are clearly indicated in the engineer's report, in which it is also pointed out that the existing equipment is amply sufficient for the purely local traffic, while any through traffic derived from or passing over connecting lines of railway is mainly hauled in cars belonging to those lines. At the time the engineer examined this portion of the property the whole section of country had been visited by long-continued and furious rain storms, extending over a large area, and over several weeks in point of time; that those storms had resulted in a general washing out and cutting up of the surface of the country; that the floods were not only unusual at that season, but unusually high for any season, rising, it is recorded, in many places higher than has been known since a great flood in 1844. That although under such circumstances of weather it was not surprising that the completed railway should have presented a somewhat dilapidated and neglected appearance, still it is only fair to state that he travelled over considerable distances on existing lines in full work which presented a similar and no better appearance. The condition cannot be very bad when we are told by the engineer's report that an intelligent road master, with a couple of extra gangs, would put all in order in a month at a trifling expense.

Referring to the doubt expressed as to whether the 500,000% will complete the line, Mr. Vernon very naively asks whether the critic who is acknowledged to know nothing about engineering and cost of construction presumes to question the very careful estimate made by an English civil engineer of recognised standing and ability in his profession, Mr. Younghusband, and practically to say that a gentleman whose probity and intelligence have been equally vouched for, has prostituted that intelligence and professional ability by rendering inaccurate estimates capable of misleading and deceiving the general public. Mr. Vernon very reasonably complains that the critic fails to notice, as any impartial and unprejudiced reviewer would have done, that the prices of labour and materials are much lower now than they have been for many years, ranging from 20 to 30 per cent., and that the present low price of all materials necessary for the construction and equipment of railways enables the company at this date to build the line most economically, and at the same time in an efficient manner. Mr. Vernon states in this connection, and that without fear of contradiction, that no American railway enterprise ever presented to the English public has ever been so thoroughly sifted, or has been submitted to more crucial tests by the bank, by the solicitors, and by the engineer, than the Keokuk and Kansas City Railway. There are no misstatements, no representations which can grossly mislead. There is no line either of the prospectus or of the engineer's report, as there is in every line of your article, a wilful perversion of the truth.

With regard to the estimates of expenditure and returns, Mr. Vernon very clearly shows that nothing imaginary is indulged in. The actual figures for the 15½ miles already worked are given, whilst for the 106 miles of road between Salisbury and Kansas City the estimate is given as such, and is borne out by the engineer's abstract of report, which shows that the traffic receipts (based on comparative statistics of other railways in similar sections of country, and careful examination into the resources of the line proper) should amount to \$5000 per mile annually immediately on the construction of the railway, but within a very few years they will average \$7000 or \$8000 per mile annually. The same report and the abstract



of it, published in the prospectus, shows that the working expenses should not exceed 60 per cent. of the gross receipts, and the minimum estimated earnings would be amply sufficient to meet the interest annually accruing on bonds.

The Keokuk and Kansas City Railway Company do not state, as has frequently been done by other American railroad companies issuing loans, that their earnings will be \$8000 or \$10,000 per mile per annum; but they have furnished the capitalists with actual and accurate data relative to the earnings of other railroad property in the State of Missouri, not half so advantageously situated for controlling business as the projected railway from Keokuk to Kansas City—they have estimated the cost of construction at the maximum, and the probable earnings at the minimum, an entirely different form of procedure to that hitherto prevalent. They have given minute official details of the character and resources of the country traversed by the railway, and everything has been done to avoid any statement approximating even to exaggeration, and to place before the public the truth, the whole truth, and nothing but the truth.

That efforts have been persistently and conscientiously made to lay every essential fact before the British capitalists, whose aid is sought is sufficiently proved by Mr. Vernon's answer, and it is much to be regretted that when such large facilities have been offered by the railway company for careful and searching investigation the publication of calumnies, instead of commendation, should have been indulged in, through the abandonment of fair and unprejudiced criticism by the same critic, whose vision has been so conveniently impaired in cases where there was just and reasonable cause for censure, and where the omission to direct attention to "statements which could not fail to be grossly misleading," resulted in serious loss to capitalists whose interests were pretended to be cared for, and in creating a cause of complaint against the United States as a safe and remunerative field for investment, which otherwise would never have existed. The Keokuk and Kansas City Railway is evidently one of those enterprises which has a brilliant future before it, provided it can surmount the financial difficulties which rendered the application for the loan now being placed necessary, and is, therefore, in every respect worthy the attention of those in a position to render the assistance sought.

#### ENGLISH AND AUSTRALIAN COPPER COMPANY.

For the information of shareholders in this company a shareholder has sent us the following remarks, which will no doubt be of much interest to new proprietors, as well as bringing to the notice of a large number of people who are now looking around for safe and *bona fide* investments a new channel wherein to invest. In laying these facts before them we do so with the knowledge that this company is not of recent introduction, but has been in existence nearly 25 years, having been formed in the year 1851 for the purpose of smelting ores more especially from the Burra Burra Mine, since which it has grown into a large undertaking, having works at the Burra, at Port Adelaide, and at Newcastle, New South Wales, besides a most valuable freehold wharf property at Port Adelaide. The sources from whence the supplies of ore are received are not confined, as formerly, to the Burra Burra Mine, but now extend over all the copper producing localities in Australia and to New Caledonia, this last new supply promising daily to become of immense importance to the company. The Government of South Australia have quite recently pledged themselves to pass a Bill for a railway to the Far North; this, as is well known, will open up unlimited supplies of ore, as stated in Mr. Austin's letter in the *Mining Journal* of Oct. 2, which can be easily placed on the floors of the company's works at Port Adelaide.

Like most other mercantile undertakings, this company has had its times of adversity, and was but recently neglected and thought little of, but through the great energy of its direction, and of its indefatigable manager in Australia, it has been safely steered through all its difficulties, and now promises to be one of the most flourishing dividend-paying companies under its present management. Having no mines of its own, being exclusively a smelting company, it is free from all mining risks—and, indeed, risks of speculation, for whilst it is daily purchasing ore in Australia it is also daily selling copper here, so that if an average of only a few years is taken it must be a profitable concern, even though the actual ore bought in one month may not be sold as copper till some months later. This might temporarily affect the profits of any particular half-year should any violent fluctuations occur in the price of copper, but as the company sends a weekly telegram to Australia the chance of its not regularly paying dividends is reduced to a minimum. In March last it paid a dividend of 2s. per share, being 4 per cent. on the paid-up capital of the company for the half-year; and again in August another dividend of same amount was declared, being at the rate of 8 per cent. per annum, and 10 per cent. upon the market price of its shares. It carried forward after paying the above dividend in March over 30000 profit, which amount still remains intact, the August dividend having been declared out of the profits made during the first six months of the company's financial year—July 1 to Dec. 31, 1874. The directors, as stated by the Chairman at the last meeting, are anxious to continue paying dividends of a regular amount every half-year, and for this purpose, although a larger dividend might have been declared, they wisely postponed increasing it, preferring to carry forward a good balance, which, with a reserve fund of over 11,000, should place them in a sound financial position. The above balance of over 30000, from last annual report, together with the profits for the year, during which there have been no violent fluctuations in the price of copper, should show a handsome amount of profit available, after deducting the August dividend, for distribution at the annual meeting in February next, though whether the direction may still recommend the more judicious plan of not dividing too closely will remain to be seen.

As the copper market goes there seems but little chance of either a rapid rise or fall, and this steady market is most conducive to the interests of the shareholders, who it is believed have now a prospect of receiving for a long time regular and good dividends, for without any great risk it is evident that 8 per cent. per annum, or as is probable even 10 per cent., in such an undertaking is more satisfactory than higher rates in questionable enterprises of no standing, or in foreign loans with the risk of repudiation or entire collapse.

**SPANISH AND RIO TINTO BONDS.**—The Master of the Rolls had before him on Wednesday the case of *Menzies v. The Corporation of Foreign Bondholders and Don Jose Borrajo*. The plaintiff, Mr. Graham Menzies, is the owner of 100,000 in Spanish bonds. It appeared that a contract was entered into between Messrs. Matheson and Co. and others and the Spanish Government in 1873 for the purchase from the Spanish Government of the Rio Tinto Mines by ten annual instalments. The instalments were secured to the Spanish Government by a series of pagares. The Rio Tinto Company was formed to work the mines. An arrangement was subsequently made, at the end of 1871, between the Government of Spain and Mr. Roger Eykyn, as representative of the Council of the Corporation of Foreign Bondholders, on behalf of the holders of overdue coupons of Spanish bonds, that the pagares above referred to should be deposited with the Council of the Corporation of Foreign Bondholders. Mr. Menzies, on behalf of himself and all other holders of overdue coupons of the 31. per cent. External Debt of Spain, filed this bill to restrain the defendants from cancelling the pagares and substituting for them Rio Tinto Bonds. The defendants demurred to the bill for want of equity and on the ground that a necessary party—the Spanish Government—had not been made a party to the suit. Mr. Robinson, Q.C., and Mr. Romer for Don Jose Borrajo; and Mr. Breyer, Q.C., and Mr. Kekewich for the Corporation of Foreign Bondholders, now appeared in support of the demurrer. Mr. Chitty, Q.C., Mr. Montagu Cookson, Q.C., and Mr. Springall Thompson supported the bill. His lordship allowed the demurrer, being of opinion that the Spanish Government had not ratified the arrangement, and that on various technical grounds the bill was unsustainable. He, therefore, refused to give leave to amend the bill, which was consequently dismissed.

Vice-Chancellor Bacon has appointed Mr. J. Waddell provisionally official liquidator of the General Register and Meter Company (Limited).

**HOLLOWAY'S OINTMENT AND PILLS: CHEST AND STOMACH COMPLAINTS.**—The source and centre of almost every ailment is impurity of the blood; dislodge this poison, and disease departs. Holloway's pills exercise the estimable power of thoroughly cleansing each component part of the blood, and rendering this fluid fit to perform its important functions. They cope most successfully with chest diseases, stomach complaints, liver disorders, and many other ladies which were once the besetting dangers of mankind at certain seasons in town and country. The directions for use enable everyone to regulate the operation of these pills with the greatest nicety. Chronical invalids, nervous sufferers, and all whom other treatment has failed to relieve are respectfully invited to try Holloway's celebrated medicine, which will strengthen and cure them.

## Meetings of Public Companies.

### RUSSIAN (VYKSOUNSKY) IRONWORKS COMPANY.

The annual meeting of shareholders was held at the City Terminus Hotel, Cannon-street, yesterday (Friday).

Mr. WILLIAM AUSTIN in the chair.

Mr. C. CLARKE, the secretary, read the notice convening the meeting, and the report of the directors was taken as read.

The report of the directors stated that a period of three years having elapsed since the accounts were examined in Russia by the company's auditors, the directors arranged at the close of their financial year to have a special audit at Vyksa. The capital stock stands at 52,7000. The special liabilities to the Imperial Government accruing during the past year have been duly met. A sixth instalment of 3437. has been paid in respect of the rail mill advances, leaving due 13,7500. on this account, and a final payment of 1481. has cleared off the arrears of interest to the Government, which had accumulated in the earlier years of the company, to the amount of 27,1600. The usual accounts have been submitted to the Princess Galitzin, the company's co-proprietor; and the payment of the amount due has been ordered to be made as soon as the accounts have been examined and agreed. The company's share of the profits of the works for the past year is 6036. This amount is increased by interest on investments, and by profits on securities realised during the current and preceding years, and also by an amount received in respect of calls in arrears on forfeited shares. The sum allowed out of the gross profits towards the London expenses is this year 22000. The net profits after payment of London expenses, and writing off sundry balances, are 8892: 23600. included in the above amount as profit on securities realised during the last two years, being of an exceptional nature, the directors propose to transfer to the reserve and contingency account.

In addition to the ordinary dividend of 5 per cent. already paid the directors have declared a further dividend of 5 per cent. free of income tax, payable on Nov. 6. The directors regret that they do not deem it prudent to continue the full rate of dividend which has been distributed during the last three years. They were obliged to submit to a considerable reduction in the prices of sheet-iron and wire during the past year. These reduced prices for manufactures, and the increased cost of production, especially in the important item of fuel, have very materially lessened the year's profits. As the prices asked by the Government have been so materially advanced as to render it impossible for the company to purchase the wood they required for the manufacture of iron, the board considered it advisable to confer with their manager personally on the subject, and they have reluctantly come to the conclusion that the prudent course to be adopted is to close for the present a portion of their works. It is, however, hoped that some sufficiently favourable arrangement may yet be made with the Imperial Government, but until this is effected it will be obvious that the operations of the company must be considerably restricted.

The CHAIRMAN said: Gentlemen, the first and most important item that strikes me this year is the diminution of profits, and on that point I propose to say to you a few words. We are suffering principally from the state of the trade. The state of the trade in Russia appears to fluctuate up and down in the same way as the state of trade in England—particularly in iron. The profit from the works during the past year shows a diminution of 17,9400. compared with the previous year, and that has resulted from several causes. We have paid more for our wood, charcoal, and minerals, to the extent of 6914, while we have also suffered in the prices obtained for the iron produced to the amount of 8563. So that the principal causes of the diminution of profit have been those two items—the increased cost of production and the diminution in the prices obtained. Now, I think we prepared the shareholders for less prosperous times at our last two meetings. We were guided in this by the contracted prices at which we sold our iron for the respective ensuing years; and, with regard to the contract which was made last month for the coming year, I am happy to state that I am quite sure that as far as prices either remain the same or are raised, or show a very slight increase in some unimportant items. But the point which gives the directors the most anxiety, and has given us the most anxiety for some time, is the question of the supply of wood. Now, three or four years ago we had, as we all know, a very prosperous time in our manufacture, and we pressed on the manufacture to the greatest extent we could naturally; and partly from the effect of that, and partly from other causes, the price of wood has advanced very considerably—so much so, indeed, as to cause us very great anxiety. Now, our own forests do not afford us the requisite supply of wood at present, and the consequence is that we have to purchase wood from the Government, and the Government is to put up to auction certain sections of wood on different estates and sell it thus in sections. The prices realised at these auctions have increased enormously, and we have searched out the causes of this increase. At first we thought it might be the construction of railways, or other causes of that kind; but later we discovered the real cause to be the competition of other ironworks, and the competition of the peasants, who use the wood to build their houses. Every now and then a village is destroyed by fire, and it has to be rebuilt of this wood, which we should be glad to get for our purposes. Now, one can easily understand that our increased production of the last few years has tended to make the villages much more prosperous, and, therefore, has enabled them to give a higher price for wood; and, so far, we have injured ourselves by this increased production. But we have (as mentioned on former occasions) entered into negotiations with the Government to contract for a certain amount of wood, to be ensured tons of a certain number of years; but hitherto we have not succeeded in completing any contract of this kind. Of course, the Government department of Woods and Forests are not very willing to let us have these woods at a lower price; but, at the same time, so much depends upon the prosperity of the company, we have so many of the inhabitants of the district who really depend upon us for support, and we pay so much in taxes, that I am quite sure the Russian Government, if it take a broad view of this matter, cannot fail to see that it is to their interests that they should allow us to have a sufficient supply of wood for our purposes at a price that will enable us to use it remuneratively. However, hitherto we have not succeeded in completing a contract of that kind; and, therefore, to this extent our future is involved in some uncertainty, and in some anxiety. We shall have in a certain number of years a sufficient amount of wood on our own estate; but we have never overtaken the deficiency existing at the time of taking possession. 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**RELIABLE INFORMATION** given respecting Mines in the Isle of Man, Flintshire, and the neighbouring districts.



## Registration of New Companies.

The following joint-stock companies have been duly registered:—

**GLENGALE IRONWORKS (Limited).**—Capital 10,000*l.*, in 20*l.* shares. To carry on business as engineers and boiler makers. The subscribers are:—W. McGeorge, Belvedere, engineer, 50; T. Kennedy, Kilmarnock, engineer, 50; T. Keating, Kilmarnock, engineer, 50; J. Kennedy, 13, Brooklyn-road, Shepherds Bush, 50; D. Massman, Tavistock-road, Notting Hill, artist, 25; D. Massman, jun., Tavistock-road, Notting Hill, clerk, 25; J. H. Halkett, 43, East India Avenue, engineer, 25; J. McNell, 4, George-street, E., 1. This company is registered without articles.

**PENNANT BARYTES AND LEAD COMPANY (Limited).**—Capital 30,000*l.*, in 5*l.* shares. To acquire mining rights in order to work for barytes, lead, and other minerals in the parish of Tremelirchion, near St. Asaph, Flint, according to the terms of an agreement made between W. Parry and J. Bartlett. The subscribers are:—A. E. Cooke, Tankerville, Kingston-on-Thames, stock broker, 10; A. Cooper, 17, Church-street, Stoke Newington, wholesale stationer, 5; B. Beazley, 67, Ruffell Park-road, mining agent, 10; W. Brodie, Ballance-road, Hackney, clerk, 5; J. B. Eastes, St. John's Villa, Loddish-lane, ship broker, 5; R. Chandler, 66, Bishopgate-street, solicitor; A. O. Cooper, 22, Beaumont-square, Mile End. The remuneration for the directors is not to exceed 500*l.*

**UNIVERSAL CARTRIDGE COMPANY (Limited).**—Capital 150,000*l.*, in 5*l.* shares. To carry on the manufacture of cartridges, &c., at Dartford. The subscribers are:—R. O. White, The Priory, Lewisham, 1; N. N. Crosswell, Osborn Lodge, near Isleworth, 1; E. Bloxam, Burlington-lane, C. J. Wood, Spring Grove, Isleworth, Alfred Bloxam, Spring Grove, H. W. Smith, 40, Craven-street; H. R. Bird, 10, Moreland-street, Bristol.

**SKELMERDALE LAND AND BUILDING COMPANY (Limited).**—Capital 20,000*l.*, in 5*l.* shares. To acquire a freehold estate at Skelmersdale, Lancashire. The subscribers (all of Southport) are:—J. Barnes, 50; J. Marchbank, 50; J. Witham, 150; R. Banbury, 150; E. Iddon, 250; J. B. Squire, 50; and J. Melling, 50.

**LOWTHER HEMATITE IRON COMPANY (Limited).**—Capital 250,000*l.*, in 100*l.* shares. To acquire the mines and works in Cumberland belonging to the Lowther Hematite Iron Company, now in liquidation. The price to be paid is 75,000*l.*. The subscribers (who take one share each) are:—T. Stevens, Milton Ironworks, Glasgow, ironfounder; Alexander Ray, Glasgow, merchant; H. Stevens, Milton Ironworks, Glasgow, ironfounder; J. Stewart, 8, King-street, Manchester, banker; Gilbert Beth, Glasgow, merchant; D. G. Hoey, Workington, Cumberland, ironmaster. The directors are:—Messrs. T. Stevens, Alexander Ray, Alfred Roberts, and D. G. Hoey, the latter to be managing director.

**HIGHFIELD COLLIERIES COMPANY (Limited).**—Capital 10,000*l.*, in 5*l.* shares. To acquire the right and title of Richard Cook, in the Lancashire and Stonegravel Collieries at Chesterfield. The subscribers are:—W. Forrest, Chesterfield, 3; R. Cook, Sheffield, mining engineer, 1; J. Lee, Chesterfield, 1; J. Orwin, Newbold, colliery proprietor, 1; C. Street, Chesterfield, 1; W. Balderson, Brampton, broker, 2. The first directors are:—Messrs. J. U. Ashkam, B. Noble, G. Orwin, and R. Cook, the qualification being the holding of shares to the nominal value of 500*l.*, and the remuneration being 100*l.* per annum.

**TARRAPORE TEA COMPANY (Limited).**—Capital 200,000*l.*, in 200*l.* shares. To acquire tea plantations in Assam. The subscribers are:—F. Fleming, 18, Leadenhall-street; R. J. Ennals, 18, Leadenhall-street; D. Macneill, 7, Louthbury; G. F. Gunnis, Leekie, Stirling; W. Macdonald, Glasgow; W. Haworth, 7, Louthbury; and W. Macneill, 18, Leadenhall-street.

**ELLSMERE BUILDING AND INVESTMENT SOCIETY (Limited).**—Capital 50,000*l.*, in 10*l.* shares. To carry on the general business of a land and investment society. The subscribers, who take 1 share each, are:—B. Eldred, 37, Manchester-square, Bolton; W. Halsall, Bolton; H. Taylor, Bolton; W. A. Johnson, Bolton; T. Gregory, Little Hulton; W. Billings, Hulton; A. Aldred, 145, Bradford-street, Bolton.

**CRAWSHAPOOTH SPINNING COMPANY (Limited).**—Capital 30,000*l.*, in 5*l.* shares. This is a Lancashire spinning company. The subscribers are:—H. Margrove, Accrington, 20; R. Clayton, Accrington, 10; J. Walsley, Accrington, 20; J. Brown, Accrington, 20; T. Walsley, Accrington, 20; D. Bell, Accrington, 20; and W. J. Holden, Accrington, 20.

**EAST SURREY HALL MUSEUM AND LIBRARY COMPANY (Limited).**—Capital 7500*l.*, in 1*l.* shares. To establish a museum, &c., at Croydon, Surrey.

**HUGHES AND KIMBER (Limited).**—Capital 25,000*l.*, in 200*l.* shares. This is a conversion of the business of the firm of Messrs. Hughes and Kimber, printing and lithographic machine makers, &c.

**BRITON LIFE ASSURANCE (Limited).**—Capital 500,000*l.*, in 1*l.* shares, with power to increase to 1,000,000*l.*. This is the first life assurance company registered as a joint stock company since the passing of Cave's Act. Its prospectus has been so extensively advertised that further particulars are unnecessary.

## THE EMMA MINING COMPANY—ITS POSITION AND PROSPECTS.

The report to be presented at the forthcoming meeting of shareholders is an interesting one, since it embraces the directors' report of the present state of the company's affairs, the solicitor's report on the Commission from America, and the report of Mr. Geo. Attwood, general manager, who will attend the meeting. The shareholders are aware that the mine was seized by Mr. Park for monies due as soon as legal proceedings were commenced against him, and has ever since been vested in the United States Marshall; but reports received from independent sources induce the directors to believe that the mine itself is, and has long been, utterly exhausted. The only available source of income that could have accrued to the company, and that only to a very limited extent, would have arisen from the concentration of the low-grade ore left from former workings. Under Mr. Park's attachment the whole of the machinery, plant, timber on surface, ore sacks, office furniture, &c., has been sold. Instructions have been sent out to pay off the Salt Lake establishment, and measures are in progress for a further reduction of expenses at the London office by the retirement of the secretary, &c. The case against the vendors is being vigorously proceeded with, and the case is now down for trial in the United States Circuit Court. The board have applied for the restitution of moneys received by certain of the original directors.

With regard to the position and prospects of the mine, Mr. G. Attwood's report shows that comparatively nothing has been done in the way of exploration, and that nothing has been discovered. The present condition of the mine is, he says, a most deplorable one; it will now be a most difficult as well as dangerous and expensive piece of work to mine what fillings, waste, and scrapings still remain. The Salt Lake office has been abolished, and the services of all employees connected with the same have been dispensed with. There are now only two men employed at the mine to watch over the shareholders' interests there. Mr. Attwood says, in conclusion, that his first report on the mine was made in March, 1873, and was an unfavourable one; that his second report was made in May, 1873, and was even more so; and that his third report made in April, 1874, was equally unfavourable. Since the last was written he has had 16 months further time to examine into the geology and stratigraphical features of Emma Hill with regard to the future prospects of the mine, and from his numerous careful observations on the subject he can only reiterate that the mine is virtually exhausted, and that their only hope for the future rests entirely on solving a geological problem which will take time, a large sum of money, and skilful engineering to solve.

**PATENT PEAT SMELTING FUEL.**—Mr. R. K. Aitchison (Redcar), writing to the *Engineer*, says—"A trial of the above fuel has just taken place under the direction of Mr. James Norie, at the Tees Foundry Works, Cargo Fleet. The basis of the fuel is, of course, peat, combined with chlorides of calcium and salt. The well-known affinity of these chemicals to phosphorus and sulphur has been amply proved in the trial of this fuel which has just taken place, the result being as follows:—The mixture of iron in the cupules consisted of three-fourths No. 4 and one-fourth No. 3. In one cupule, as usual, coke only was used; in the other a combination of half peat and half coke. Bars 3 ft. long, 2 in. wide, and 1 in. thick were cast from each of the cupules. The coke iron stood about the usual test of 26 cwts. The peat and coke fuel combined drew 31½ cwts. and broke at 32 cwts., thus showing an improvement of 25 per cent. I am informed that this is a great test for Cleveland iron; yet, under more favourable circumstances as to manufacturing machinery, I feel morally certain I can reach a test of 35 cwts., if not more. The cost of the peat fuel is somewhat about the price of coke, and great facilities exist in the immediate neighbourhood of Middleborough for the manufacture of the same. My object in addressing you is to obtain opinions as to the improvement of—of course, if correct—effected by this fuel. Mr. Norie has further informed me that this fuel strengthens the iron, but does not harden it. This test should prove of the greatest importance, more especially as regards the Cleveland district, in the manufacture of malleable iron. In your number of the 15th inst., in speaking of my peat smelting fuel, your correspondent suggests that I use charcoal; such, however, is not the case. I use simply the peat from the bog, which is passed through a masticating machine, during which operation the chemicals are introduced. It is then air-dried under sheds. The first cost, including all contingencies, is from 8s. to 10s. per ton."

**REMOVAL OF GARVEL PARK LIGHTHOUSE.**—Yesterday week the piles on which Garvel Park Lighthouse rested were blasted with dynamite, in order that they may be removed and the site dredged to make the navigable channel wider. The blasting operations were entrusted to the British Dynamite Company, and were carried through successfully. For fully a week past workmen were engaged making a bore about 20 ft. down into the river bed, and yesterday week the bore was filled with a charge of 130 lbs. of dynamite. A 12-minutes fuse was lighted, and the explosion which followed thoroughly shattered the foundation of the piles, so that they can now be extracted without much difficulty. The huge blast was witnessed by Mr. Henderson and Mr. Graham, chairman and secretary of the Cumbrae Lighthouse Trust; Mr. Kinnipie and Capt. Miller, engineer and harbour-master to the Greenock Trust, and others.

## Mining Correspondence.

## BRITISH MINES.

**ABERDAUNANT.**—S. Toy, Nov. 3: Setting Report: No. 1 adit level to drive east, at 6*l.* per fm. for the month, and to clear all their stuff; the lode is 5 ft. wide, producing stones of lead, and looking kindly for further improvement. The roof of this level to stone by 4 men, at 16*l.* per cubic fathom for the month, and to clear all their stuff; the lode is worth 13*l.* per fm. for lead. We sold on Friday last 11 tons 8 cwt. 2 qrs. of lead ores.

**BEDFORD UNITED.**—William Phillips, Nov. 4: Operations at the engine-shaft are progressing favourably. In another month we hope to have a plunger-lift fixed at the 115, and to be in a position to set the men a bargain to put the shaft to a deeper level. The trip-plat under this level is completed, and a cross-cut put out from it to intersect the north part of the lode, which is worth at this point about 20*l.* per fathom. This speaks well for the mine on account of its being to the east of the very fine shoot of ore making down a few fathoms further west. The stone in the back of the 115 east is worth 25*l.* per fathom. In the end being driven upon the north part of the lode from this level the lode is worth at present 8*l.* per fathom. In the 115 west the lode is 2½ ft. wide, producing saving work, and looking more promising. We are driving by the side of the north part of the lode from this level. In the back of this level, about 5 fms. west of the shaft, the lode continues to look exceedingly well, the point at present being stopped is worth full 104*l.* per fathom. The ore at it is being broken is worth from 8*l.* to 10*l.* per ton. In the 103 east the lode is very strong and promising, being 3 ft. wide, and at present worth 10*l.* per fathom. The stone in the bottom of this level is worth 15*l.* per fathom. The cross-cut is still being driven to intersect the north or main part of the lode from the 103 west. The winze sinking in this level is producing about 20*l.* worth of ore per fathom.

**BOG.**—W. T. Harris, J. Barkell, Nov. 3: Engine-shaft sinking below the 175 is making fair progress, and without any particular alteration. The various bargains and pitches throughout the mine are much the same in prospects and in produce of lead ore and blende as reported last week.

**BRONFLOYD.**—J. Davis, Nov. 4: To drive a cross-cut north from the 110, to intersect the lode, to nine men for 20*l.*, including haulage of stuff to the 90. I expect to cut the lode here in course of eight or nine days, but we shall have about 4 fms. to drive afterwards before we reach the north wall. The bunch of ore upon which the No. 3 shaft is sunk dips westward, and at the 96 the richest part of shoot is 10 fms. west of shaft; we shall, therefore, have to drive about 12 fms. west before we reach the corresponding point at the 110. To stop above the 96, to 23 men, at 75*l.* per cubic fathom; average value of the lode, 22*l.* 10s. per cubic fathom. To drive the 96 westward, to four men, at 140*l.* per fathom; the lode here is about 4 fms. wide, and contains some fine branches of ore, but the bunch found in the 84, west of Joshua's winze, is a few fathoms in advance of us yet. To stop above the 73, to 10 men, at 70*l.* per fathom; average value of the lode, 16*l.* per cubic fathom. To drive cross-cut north from the forebrest of the 73 (50 fms. east of No. 3 shaft), to four men, at 100*l.* per fathom, including removal of stuff. I think we are entering into a better channel of ground here. The north branch of the lode intersected since my last report contains carbonate of lime, mundle, and specks of lead ore, and is of a much improved appearance to what it is about 15 fms. back. Middle Lode: To drive the 52, west of Lloyd's cross-cut, to four men, at 140*l.* per fathom. There is a strong lode here, but it is not of much value for lead ore at present. To drive the 40, east of shaft, to six men, at 180*l.* per fathom; value of the lode, 16*l.* per fathom. The machinery is in good order and in full work.

**CMDWRMAWR AND DROGOL (ROYAL).**—J. Davis, Oct. 30: The cross-cut to the lode must be now approaching it as there is a tremendous stream of water issuing strongly tinged with red, which is a good sign. The men expect to get into the lode this month.

**CARGOLL.**—J. Jennings, Nov. 3: We are progressing very satisfactorily in the sinking of Doctor's engine-shaft; the lode is 3 ft. wide, yielding stones of lead; I am anticipating a good improvement here when the south branch drops in with the lode, which will be in about 6 ft. more sinking. In the 11 west the lode is 2½ ft. wide, yielding good stones of lead, and more so for driving, and the lode is free from the lode, which is a good indication. In the 11 east, on the north part, there is no change in the lode since last reported on. In the 11 east, on the south part, the killas is now of a more congenial character, and is easier for driving, and better progress is being made; the lode is 1 ft. wide, consisting chiefly of flookan and quartz, with occasionally spots of lead.

**CRENNER AND WHEAL ABRAHAM UNITED.**—Wm. Thomas, 8, Arthur, Nov. 3: Sturt's Engine-Shaft: In the 228, driving west, the lode is 5 ft. wide, and will yield 1½ tons of copper ore per fathom; the lode here has very much improved in the past week, and looks kindly to further improve. St. George's Shaft: To drive cross-cut north from the forebrest of the 228, to four men, at 140*l.* per fathom. The lode here is 3 ft. wide, and will yield 4 tons of copper ore per fathom. Woolf's Shaft: In the shaft sinking below the 220 the lode is 6 ft. wide, yielding some good copper ore; we anticipate an improvement here shortly. In the 220, driving east, the lode is 3½ ft. wide, yielding 3 tons of copper ore per fathom. Blewitt's Shaft: In the 234, driving west, the lode is 4 ft. wide, composed of mundle, peach, and spar. Richards's Shaft: In the 220, driving west, the lode is 5 ft. wide, yielding 3 tons of copper ore per fm. In the 210, driving west, it is 5 ft. wide, and will yield 1½ tons of copper ore per fathom. We have communicated the winze sinking below the 200 to the 210, and have put the men to sink the lode in the bottom of this level, where the lode is 4½ ft. wide, and will produce 2 tons of copper ore per fathom. In the 200, driving west, the lode is 2½ ft. wide, occasionally yielding stones of copper ore.

**CWM ELAN (NEW).**—W. Goldsworthy, Oct. 30: In the 30, west of shaft, the lode is 18 in. wide, composed of capel, lead, and blende ores, of the latter two worth 15 cwts. per fathom; there is a strong feed of water coming from this end. In the same level, east of shaft, the lode will produce 11 cwts. of lead and blende ores per fathom. No. 1 stop, in the back of the 20, will produce 12 cwts. of lead and blende ores per fathom. No. 2 stop, in the back of the 20, will produce 10 cwts. of lead and blende ores per fathom. The same level, east of shaft, on the south side, will produce 10 cwts. of lead per fathom. The stone in the back of the 20, west of the cross-course, will produce 14 cwts. of lead ore per fathom. The same level, east of the cross-course, is yielding 16 cwts. of lead ore per fathom. We are driving on with all speed for the next parcel of lead, hoping you received the sample thereof in due time.

**CWM TUDOR.**—Isaac Williams, Oct. 30: There is a great improvement in the forebrest of the adit going west towards Cwnbyr, and I am in hopes of cutting lead every day.

**DE BROKE.**—T. Hodge and Son, Nov. 1: Wilson's shaft is below the 25 about 4 fms. 2 ft., going down in a best quality of mineralised slaty rock. We calculate to strike the lode in another 7 fms. sinking, which will occupy (say) three months; and, judging from the favourable character of the rock, as well as the lode gone down in bottom of the 25, we feel anxious that the vein will be found highly productive at the next level. The 25 is extended west from Wilson's about 8 fms., at which point we are cutting through the lode to prove its value; so far as seen, the vein is showing a very good appearance, composed of quartz, lime, mundle, and rich stones of yellow copper and lead ore—dressing work. The stone in back of the 25, west of the junction, is worth 10*l.* per fathom; the said stone is about 4 fms. back of the level, leaving the lode in the 25, and have put the men to sink the lode in bottom of this level, under the said stone, is about 9 fms. long, worth on an average nearly 30*l.* per fathom—a fine lode. The stone in bottom of the adit level, east of trial winze, is worth 9*l.* per fathom; this stone is getting nearly exhausted. The machinery is in good order, and working well. At surface our dressing-floors are for the time completed, good sheds over the same, and the walls of the ore bin are up ready to receive roof.

**DENBIGHSHIRE.**—J. Pryor, Nov. 4: The engine is now working only half-time, and the water is kept under with great ease, which must be satisfactory, considering the heavy work we have had of late. The lode in the 15 one mile is about 2 ft. wide; there is a sound in the lode, which we are confident that the lode is at hand, and that the same will be the intersection of the run of ore left at Parry's. The north cross-cut out of this level shows no change. The 112 east, in my opinion, changing favourably, and I hope soon to be able to report our having met with one of the courses found in the shallow workings above us. The machinery is working well, and all operations are being carried on in a satisfactory manner.

**DEVON GREAT CONSOLS.**—Nov. 5: There is nothing new to report this week, except that 1371 tons of ore were sampled the 29th ult., for sale next Thursday week, the 18th inst.

**DEBBY SYKE.**—Wm. Tallentire, Oct. 29: Dubby Syke Level: The men are making good progress in opening out the level eastward; it is still crushed close. There is nothing new in the Shooting Box level. We are driving across the corner to the level. The ground is rather stiff, but not far through. We have almost got the blacksmith's shop wall up, and have covered a few more yards of the new road with cuttings.

**DYLIFFE.**—Edward Rogers, Nov. 3: Dylyffe Lode: In the 120, driving east of boundary shaft, no lode has been broken during the past week; when last taken down it was worth 15*l.* per fm. In the 25 end, driving east of old engine-shaft, the lode is 2 ft. wide, worth 7*l.* per fm. In the 15 one mile, the east of this shaft, being very hard, we cut into it until the level is driven about 4 or 5 fms. further in this direction. Egalgaled Lode: The winze in bottom of the 85 is communicated to the level below. In the 45, west of the shaft, we have commenced to cross-cut into the lode. A setting report shall be sent you next week. We are sampling 80 tons of lead ore to day, for sale on the 10th inst.

**EAST BASSET.**—Richard Pryor, Edward Adams, Nov. 3: The tutwork bargains throughout this mine continue just as when last reported on.

**EAST CHIVERTON.**—Richard Southey, Nov. 4: The engine-shaft is now sunk 2 fms. below the 64, during the past three weeks. The shaftmen have been busily engaged changing the pitwork, and having now got the same in thorough good working order, the sinking will at once be resumed and carried out with all possible dispatch. The ground in the 64 cross-cut north is much harder than it was at the last general meeting; we are now paying 6*l.* per fathom instead of 2*l.* 10s., the price at that time. This change in the ground, although having impeded our progress, yet tends to confirm my opinion that the lode when met with will be a productive one, the strata being similar in character to that of West Chiverton, and the depth being the same as that at which the lodes throughout the district began to be remunerative. In conclusion, I have every reason to believe with little more patience and outlay, our efforts will be attended with profitable results.

**EAST VAN.**—W. Williams, Nov. 3: The new shaft is for the present suspended owing to the very heavy rains of late, although the shallow adit has drained three-fourths of the former feed. The last stem worked the men out into a very strong feed of water coming from the lode, and at the same time got into ground very congenial for the production of lead ore. I shall expect, if this ground continues, to have the pleasure of reporting the productive lode in this shaft ere long. As soon as we get the engine and draining-machine ready, which Mr. Carver promised (yesterday) would be ready in about three weeks' time, we shall resume sinking the shaft. We are pushing on the 28, west from engine-shaft, and are within 30 fms. of getting under new shaft, but we may drain the water from the new shaft any day; let to six men at 85*l.* per fathom.

**EAST WHEAL GRENVILLE.**—E. Hosking, W. Bennett, Nov. 4: The lode in the stop above the 120, west of engine-shaft, is worth 5*l.* per fathom. In the 120 cross-cut north we have intersected another branch. The stone above the 110, east of cross-course, is worth 6*l.* per fathom. In the 75, west on counter, the lode has a better appearance, and is producing some good copper ore. The lode in the 25 east of the 80 cross-cut, looks kindlier, and yields saving work for copper. In the 25 east no lode has been taken down since last week.

**GAWTON COPPER.**—George Rowe, George Rowe, jun., Oct. 20: The lode in the 117, east of King's shaft, is 4 ft. wide, producing arsenical mundle, with good stones of ore. The men formerly engaged in stoping down the side and back of the 117 are now engaged in driving through the cross-course, and further into the south ground, to ascertain if any part of the lode remains undiscovered in that di-

rection. The lode in the winze sinking below the 105 east is worth 6*l.* per fathom. The lode in the rise in the bottom of the 105 is worth 6*l.* per fathom. The lode in the winze and stopes in the back of the 95 east is worth 5*l.* per fathom. The lode in the stopes in the back of the same level (95), east of said winze, is worth 20*l.* per fathom. The lode in the 82 east is 6 ft. wide, chiefly composed of spar and capel, with occasional good stones of ore. The stone in the bottom of the 82 is worth 9*l.* per fathom. The rise and stopes in the back of the 79 are worth 9*l.* per fathom.

**GLASGOW CARADON CONSOLS.**—W. Taylor, W. J. Taylor, Nov. 1: We are change of importance at either point. The winze at the bottom of the midway is down to water, which is very nearly as deep as the 78 level; we are driven west from it to get back towards the cross-cut; lode in bottom and end worth 15*l.* to 16*l.* per fathom. The 78 west, driving by the side of the lode, which has not been taken down since last report, then worth 10*l.* per fathom. The middle level west, worth 5*l.* per fathom. The east on south part worth 10*l.* per fathom. No change in the 65 east, or any other point, since our last report. The stopes and pitches throughout the mine continue about the same value. We are pushing on the work at the new shaft as fast as possible; owing to the flood it is letting down a good deal of water, which we shall take up as soon as the pit work is ready. The quantity of ore for our next sale is computed at 245 tons, which will be sold on the 18th inst.

**GLYN.**—James Roach, Nov. 2: We are making very good progress in sinking. Discovery engine-shaft, and hope to be deep enough to drive the first cross-cut to intersect the lode about the end of this year. Other work going forward satisfactorily, and the engine doing its work, pumping and drawing admirably.

**GREED AND MERLYN.**—Edwards, Nov. 4: Our new discovery promises to be most valuable. The deeper we go the more mundle is the lead found. The lode is of splendid character, its composition being all that could be desired. I have had an assay made of the ore, and the result is 80 per cent. for metal, and 120s. 5 dwts. of silver per ton. You shall have full report in my next, with valuation.

**GREAT LAXEY.**—J. Cornish, Oct. 26: Deep Mine: Since our report for the general meeting of the shareholders, held on the 13th ult., we have no change, on the whole, to notice, except that the lode in the 280 and 190 north ends is rather improved and improving in value, and will, in all probability, even beyond a doubt open out for us good stoping ground.—Dumbells: The lode in the 200 ends, both north and south, are not quite so good, but we have communicated No. 1 winze from the 185 to the 200 south, thus giving the latter better ventilation, and laying open valuable stoping ground when required. The lode in the 185 end, driving north, has much improved, and is worth 18*l.* per fathom. The 170 end, driving north, has also rather improved, being now worth 12*l.* per fathom. The lode in the 140 south is yet without much change, but we are daily expecting an improvement, from its very favourable appearance. In the 152 north we last reported a split in the lode, and, moreover, stated that we like to see these changes, &c. I am much pleased to inform you that our prediction has been verified, for I saw yesterday (Monday) that we have a lode in the end, now worth from 25*l.* to 30*l.* per fathom. I have no doubt from its appearance that we have reached the same run of rich ore ground we have in the 110 over. The various stopes in the part of the mine are producing about their usual quantity of ore, and our dressing for the next sampling is progressing satisfactorily. Everything is going on pretty well as usual.

**GREAT RETALLACK.**—J. Harris, Oct. 30: In the 40 east the men holed to a small bottom from the 35 yesterday, which reached down about the middle of the end; it is about 6 ft. long. There seems to be a good patch of blende in the end, but I cannot see much of the lode yet to say its value. The men in sinking the winz-shaft below the underlay to the 40 are making very satisfactory progress. I am pleased to say that two of our pitches have improved for blende, and at present the men are making good wages.

**GREAT RETALLACK.**—John Harris, Nov. 4: The leader part of the lode in the 40 east is 3 ft. wide, containing a good branch of lead for about 2 ft. up from the bottom of the end, worth 5 cwts. per fathom, with a very kindly appearance. The men in sinking the winz-shaft below Stephens's underlay have holed to the 40, and I last reported I am pleased to say have passed through a leader of good blende ground for about 18 in. wide, worth 1 ton per fathom; this is quite unexpected, and I hope it will lead to something good, as the leader is towards the hanging part of the lode. I am hoping it will extend both east and west of the shaft parallel with the footwall of the lode on which our main level is in the 40; the men are engaged cutting down the shaft, making peat, &c., in the 40, which I hope will be completed by the end of next week.

**GREAT WEST VAN.**—T. Hodge, Nov. 2: In the 46 west end the lode is yielding some very rich stones of ore, and letting out water freely; we still have patches of the dark barren rock in the end. I expect to get through this in a few feet more of digging, when without doubt we shall soon be into course of ore. We have started a rise in the back of the 46 west level, and a point 14 fms. east of Thomas's winze, to communicate with the 34; this done, the ore ground in the latter level can be taken away to good advantage. The plat in the 46, at the old shaft, is completed, which will enable us to take the stuff with greater economy. The vein in the 40 west end yields occasional stones of ore. We are making good progress in sinking Eliza's shaft below the 34; it is below said level over 7 fms., going down in a beautiful mineralised rock. I see no change in the 34 north cross-cut since my last, except a slight increase of water, which is favourable. The 34 west end is without change to notice; I do not expect much change here until we reach the branch referred to in my former reports. We have not yet come on the lode in the eastern part of the mine. The weather has been so bad that we could do but little at surface. I am still as sanguine as ever that time only is required to make this a good paying mine.

**GREEN HURTH.**—W. Vipond, Oct. 30: There is no change in the cross-cut east from the south end of No. 1 cross vein, except that we are getting into cleaner ground; it is still very hard. In stop No. 1 below adit we are still clearing off the sides, and getting strong crusher work. Stop No. 2 below adit continues as usual for ore, but takes a deal of filling up. In stop No. 1 above adit we are clearing off the sides, which is producing strong crusher work. It will take perhaps another fortnight to clear off the sides of these stopes and fill up the ground, so as to go clearly ahead again. The rise to surface is going up satisfactorily, far, nothing in the plat at this point. No. 3 cross vein continues about as usual; there is good ore in the top part in the limestone, but nothing in the hazels and grey beds below. There has been some nice samples of ore the last shift this week from the old vein east. In conclusion, I may say that the stopes on No. 1 cross vein, No. 2 below adit and Nos. 1 and 2 above are still very good, and we can soon get a lot of ore from them if we only had the ground filled up and the stopes working. The erection of crushing-mill and lead ore dressing machinery, also the new dwelling house for agent, which this week made better progress, as we have had more favourable weather.

**GROGWINION.**—J. Kito, Nov. 2: The shaft is down 14½ fathoms below the intermediate level, and the rise from the deep adit is up 28 fathoms towards it, and both are in good ore. We have now only about 10 fathoms more to rise and sink to communicate. The lode in the intermediate level, driving towards the eastern ground, is looking well, and is worth from 30 to 35 cwts. of lead ore per fathom; and the 38 fathom level, driving in same direction, is also in good ore, and worth 30 cwts. per fathom. The winze sinking below the old 10 fm. level east is going 25 cwts. per fathom. The lode in the 150 fm. level, west of the cross-course, is down through very good ore ground, worth about 1 ton of lead ore per fathom. The 24 end is poor at present, but I expect this will improve again shortly, as there is a great length of good ore round yet in advance of this. The stopes throughout the mine have improved since the date of my last report, and are now looking very well; and our prospects, on the whole, I think, were never better. We shall sell 70 tons of lead ore to-morrow, being the produce of last month's working.

**HALKYN DEEP LEVEL.**—Nov. 1: Saturday last was our setting-day at the above mines. The trial level to drive east of junction on the Panty-Go vein, about 174 yards level, is set to two men at 8*l.* per yard. The lode at this point is about 2 ft. wide, principally composed of quartz, and is full of good stones of lead and blende ore, looking promising for further improvement soon. We have opened out ground at this level sufficient to set a tribute tube, behind the end, to four men in the roof of the level, at 9*l.* per ton tribute, where the lode will produce 12 cwts. of lead ore per fathom. The pitch below the 174 yards level, north-east of junction on the deep level vein, is set to four men at 9*l.* per ton. The lode in this pitch is 4 ft. wide, worth 14 cwts. of lead ore per fathom. This pitch is worked down 26 yards below the 174 yards level. There is still a large extent of unexplored ground between this pitch and the deep level, towards Lewis's shaft, which no doubt will yield a good deal of ore when it is opened. The pitch over the 174 yards level, about 60 yards east of junction on Panty-Go vein, is set to two men at 9*l.* per ton. This pitch is in old workings. There are two men, as usual, keeping up the repairs to the deep level. We had 10 men on tribute this month, and four on tutwork. We are drawing up the tributors' work for last month, and shall have about 10 tons of clean ore by the time it is washed up.

**HINGSTON DOWN CONSOLS.**—James Richards, Nov. 4: Bailey's shaft is in regular course of sinking below the 150 fm. level, and 2 ft. of the lode being carried is more promising, being composed of quartz, capel, and mundle, and during the past week good stones of both copper and tin ore have been broken.—Bailey's Shaft: The lode in the 150 fm. level west, and west of communication, where being stripped down, is still 4½ ft. wide, and worth 8 tons of ore, or 32*l.* per fathom. The lode in the two stopes in the back of the 150 fm. level west is still worth 8 tons of ore, or 24*l.* per fathom. In the two stopes in the bottom of the 140 fm. level west, and west of Allen's winze, the lode is worth on an average 8 tons, or 30*l.* per fathom. We continue to drive the 140 fm. level west, by the side of the lode, the ground at present proving hard, and progress slow. The lode in the two stopes in the bottom of the 130 fm. level west is worth on an average 5 tons of ore, or 20*l.* per fathom. In the 120 fm. level west we continue to carry 5 ft. of the lode, which is composed of mundle, capel, quartz, peach, and a little of both copper and tin ore. The lode in the stopes



approach to the main lode, and the water has much increased. A stope over the 181, east of Pickett's, to two men, for one month, at 3/ per fathom; lode worth 181, per fathom. To drive and stope over the 181, to four men, for one month, at 4/ per fathom; lode worth 201, per fathom. The weather continues very rough and wet for our surface work.

**NEW CHIVERTON.**—J. Trewartha, Nov. 4: The engine-shaft is down 7 fms below the 35, ground favourable for sinking, and the lode improving. To-day we have hauling up some good lead work from the bottom of the shaft. In the 35 south the men are driving by the side of the lode. In the 35 south the lode is worth 7/ per fathom. In the rise above the 35 the men are rising by the side of the lode. In the 25 south the lode is worth 6/ per fathom. The winze sinking below the 25 is for the present going down by the side of the lode. The tribute department continues to look well.

**NEW ROSEWARNE.**—E. Hosking, W. Bennetts, Nov. 4: The 67 end west is looking out a good deal of water, and is yielding a little copper ore and blende; it looks kindly for an improvement. The lode in the rise above the 67, west of Pool's shaft, is worth 5/ per fathom. The lode in the 55, west of Pool's shaft, looks promising, and is 2 ft. wide, producing stones of ore. The lode in the winze below the 55, west of Pool's shaft, is worth 10/ per fathom. The winze below the 55, to communicate with the 67 rise, is worth 4/ per fathom.

**NORTH LAKY.**—R. Rowe, Nov. 4: Telegram; Lode in 84 end improving for lead and silver.

**NORTH POOL.**—W. C. Vivian, F. Clymo, Nov. 4: At present the lode in the 40 end is 15 ft. wide, but it continues in a course of about 20° south of east, and contains lead of quartz, copper, munda, &c., which I look upon as the parts which will gradually form the whole lode, and lead to a large production of copper. We are in a very rich mining district, but one in which, even in the best mines, barren belts of rock occur between the most valuable formations of ores, and these have to be encountered and got through. Seeing, therefore, how productive of copper the lode which we are now opening out was in the old workings to the east, and the large section of unwrought ground intervening we are afforded a very strong inducement to push on our 40 level into this unexplored part of the mine as rapidly as possible. We have also a long stretch of completely untried ground extending westward to our boundary from the point at which the lode has been intersected in the 40 ft. level.

**NORTH TREKERRY.**—R. Pryor, Nov. 3: Setting Report: On Saturday last we set the following bargains:—The shallow adit level to drive east of Doctor's shaft, by four men, at 6/ 6s. per fathom; lode worth 10/ per fathom for copper. The deep adit cross-cut to drive south of Scorrer Consols shaft, by four men, at 15/ 6s. per fathom. We have cut several branches of spar, and the indications lead us to believe we are near the bottom. To stope the back and the bottom of the Highburrow shaft, by four men, at 4/ per fathom; lode worth 18/ per fathom for tin. To stope the back and the bottom of the adit level, east of Highburrow shaft, by six men, at 4/ 10s. per fathom; lode worth 15/ per fathom for tin. A tribute pitch in the back of the 30, south of Scorrer Consols shaft, to four men, at 13s. 4d. in 1/2. The other tribute pitches were set last month for two months, and are just as last reported on. Our pay and setting passed off well.

**OLD BOTTLE HILL.**—B. Unsworth, Nov. 1: Farley's pitch, in back of the 12, is looking very well, and from present appearances the tributors will earn good wages. We have about 12 tons of munda for sale.

**OLD TINCROFT CONSOLS.**—Jas. Pope, Nov. 3: In the 30, west of Diamond shaft, the lode is worth for tin 7/ per fathom. In the 10 west the lode is worth for tin 10/ per fathom. We are preparing the engine and other surface work as fast as possible, but I am sorry to say the wet weather is very much against us, so that we cannot get on as fast as we wish.

**OLD TREBURGETT.**—W. Hancock, W. T. Bryant, Nov. 3: There is not much alteration in any of the ends since our last report; will send detailed report next week. Messrs. Sheldon, Bush, and Co.'s parcel of silver lead ore is all delivered at Wadebridge, and we are, as usual, preparing for another parcel. The cargo of sulphur iron will be delivered by the end of next week.

**THE MOUNTAIN.**—T. Mitchell, Nov. 1: Setting Report: The 90 cross cut, by six men, the month at 10/ 10s. per fathom. The ground in the forebreast is more compact, consisting of chert rock, mixed with sulphur. The stope at the intermediate level, west, by four men, at 6/ 10s. per fathom; lode worth 3 tons of copper ore and 2 tons of sulphur per fathom. The stope at the intermediate level, east and west of winze, by six men, at 6/ per fathom; yielding 4 tons of copper ore and 2 tons of lead per fathom. A stope at this level, east of cross-ore, by two men, at 6/ per fathom; lode worth 2 tons of copper ore and 1 ton of sulphur per fathom. The stope at the 65, east of rise and over the latter, by six men, at 6/ per fathom; lode worth 4 tons of copper ore and 1 ton of sulphur per fathom. The stope at the 65, west of winze, by six men, at 6/ per fathom; lode worth 4 tons of copper ore and 1 ton of sulphur per fathom. The stope east of this place, by six men, at 6/ per fathom; this point has improved lately, now worth 5 tons of copper ore and 1 ton of sulphur per fathom. The quality has also improved. The 65, to drive a little copper ore and sulphur—saving work. The 45, to drive east of cross-ore, by four men, at 8/ 10s. per fathom; lode worth at present 2 tons of copper ore and 1 ton of sulphur, and in 1 or 2 fms. driving we hope it will enter into good ground for stopes. The trial cross-cut at the 30, by four men, at 7/ per fathom; here we also expect soon to reach the run of ore-bearing ground, and hope to lay open good ground for stoping. We have let nine tribute pitches to 14 men at the usual tribute prices. All surface operations are going on very well.

**FARLEY'S MOUNTAIN.**—T. Mitchell, Nov. 4: All points of operation are going on regularly since our setting-report on Saturday. The stope at the intermediate level, over the 90, have improved very much the last day or two; this looks encouraging, as these stopes are being worked into new ground.

**PATELEY BRIDGE.**—C. Williams, Nov. 3: I have no particular change of importance to advise you of this week in any part of the mine. All the productive points of operation remain as last reported. The west cross-cut in the 20 is still in a rich course of ore.—Engine Shaft: We have not been able to do anything here this week, and I fear that we shall not be able to resume the sinking for some time to come on account of the great increase of water. All the machinery in good working order. Crushing and dressing ore progressing favourably.

**FEDERAN DREA UNITED.**—W. Tregay, Wm. Prideaux, J. Pope, Oct. 30: 5 fms: The lode in the 160 west end being still unsettled, and only producing a small quantity of tin, we think it desirable to cross-cut for a few feet to see if more branches can be met with. In the 150 west end the lode (Martin's) is worth 8/ per fathom. In the 140 west end the lode (Martin's) is worth 12/ per fathom.—Cardozo's: In the 100 west end the lode (north) is worth 15/ per fathom. In the 90 west end the lode (north) is worth 12/ per fathom. In the 80 west end the lode (north) is worth 10/ per fathom. In the 70 west end the lode (north) is worth 10/ per fathom. In the 60 west end the lode (north) is worth 15/ per fathom. In the 55 west end the lode (north) is worth 8/ per fathom. In the 47 west end the lode (north) is worth 6/ per fathom.—Orchley's, 50 to 90: We are proceeding with cutting down and timbering this shaft as rapidly as the ground will permit; it has been rather heavy, but we hope it is improving in this respect.—The 140 Rise: We cannot give you more information respecting the tin here than last report, there not being sufficient ventilation for its development; we can go on rising, we think, pretty well, and communication is effected with the 120, which will require about four weeks, but if we commence blasting to open the lode before this communication is effected it would be likely to necessitate other ventilating arrangements. There is tinstone here of good quality, which can be readily developed as soon as the rise is through. In the 90 north we have some branches, and we have set the men to drive east to prove them. In the 47 east we have broken some stones of tin, but the lode does not yet look so promising as where first seen in the shaft; we, therefore, intend to open a little further north in this end to see if any part of the lode may be standing there. In the 47 south we have intersected some branches, but think it advisable to defer their development until the east end is more developed. We sold on Wednesday 12 tons 2 qrs. 3 lbs. of black tin at 52/ 7s. 6d. per ton and on Saturday 10 tons 3 cwts. 2 qrs. 3 lbs. of black tin at 52/ 7s. 6d. per ton.

**PENNERLEY.**—W. T. Harris, J. Delbridge, Nov. 3: Engine Shaft: The lode in the 130 west is without change calling for remark. The lode in the 130 west has greatly improved, from 1 ton lead ore per fathom, and to all appearance is just entering a good run of productive ground. The lode in winze, sinking below the 70, is worth 1 1/2 ton lead per fathom. The winze sinking below the 60 is worth 1 1/2 ton lead per fathom. The ground in the cross-cut, driving north at the 20, is favourable for progress.—Rutter's Pit: The sinking of the shaft is going on regularly, and is down below the level 1 ft; this, the 75 west, on north lode, is now 8 fms. from cross-cut, the lode producing good stones of lead ore. We are pushing forward this driving for the benefit of the winze in course of sinking below the level above, and laying open ground for stoping.—The 65 ft. level: Nos. 1, 2, and 3 winzes, sinking below this level, are yielding lead ore quite up to the value put on them last week. The ground in the 45 cross-cut, driving south, maintains its encouraging character, and satisfactory speed is being made in going forward. All the stopes and other bargains throughout the mine are without change, and quite equal to value reported last. To-day we have sampled 30 tons lead and 15 tons blende, for sale on the 10th inst.

**PLYMOUTH.**—J. Garland, Nov. 3: New Shaft: The water has been drawn out, and sinking resumed this day; the lode will come into the shaft shortly, and I hope in future to report good progress weekly. In the 24, east of Hughes' winze, the lode is 2 ft. wide, chiefly composed of calc-spar, blende, and munda, with good stones of lead ore occasionally, but not sufficient to value. In the 12, west of engine-shaft, there is a strong lode, principally blende and munda. In the cross-breast north of adit level, towards new lode, the ground is easier for driving, and better progress is being made. The stope over drift, east of rise, produces from 7 to 10 cwt. of lead ore per fathom. The drift east and west of Hughes' winze carries a very fluctuating lode, varying in produce from 1/2 ton lead ore to occasional stones only. The stope over the 12 has slightly improved, now yielding 1/2 ton of lead ore per fathom; this stope will still increase in yield as it gets up. Surface operations are hindered by wet weather, but everything possible is being done in drawing and dressing.

**PORT NIGEL.**—J. Manley, Nov. 3: At the 50 west the lode has not been taken down during the last few days. It has well-defined walls, is embedded in a nice micaceous rock, and its fissures are filled with carbonate of lead. I expect an early improvement here. We shall commence the rise over the 56, with the winze at foot of shaft, to-morrow morning, when the driving of the 56 east will be resumed. The winze sinking below the 44 is worth 12/ per fathom. In the 44 east the lode is yielding good lumps of lead ore—a very kindly end indeed. All other work connected with the underground department here goes on regularly, and the different stopes are looking just the same as for some time past. The continuous heavy rains for some days have operated much against our surface work. We shipped on Saturday last 64 tons 4 cwt. of lead ore to Messrs. Weston, Son, and Co., of Bristol.

**PRINCE OF WALES.**—J. Andrews, J. Pryor, Nov. 3: There is no change in the 71 west since last report. In the 55 west the ground is a little easier for progress. No other change.

**RELISTIAN CONSOLS.**—John Curtis, Nov. 1: The water is now nearly drained from Duke's shaft, and we shall commence to close the shaft for the purpose of cutting pit and sinking below the 24. We have drained the whole of the shafts with about 5 tons of coal.

**REIDILL.**—John Ridge, Oct. 30: The 30 continues to yield a good mixture of blende and strings of lead and copper, but not looking quite so well as when last reported, owing to a joint crossing the end, which has disordered the lode a little; the lode continues very strong, and lets out water freely. There is no change to notice in the 10 west.

**ROMAN GRAVELS.**—A. Waters, Nov. 4: With the exception of the 80, south of Corfield's, where the lode is twinned up again, the mine is without change since my last report. There is a long piece of productive ground south of the said 80 end,

hence the present falling off in the value of the lode is only temporary. We have to-day sampled 200 tons of lead ore, for sale next week.

**ROSEWALL HILL AND RANSOM UNITED.**—Wm. Bugelhole, John White, Nov. 4: We are pleased to report the discovery of another carbons in the back of the 101 ft. level, of the north cross-cut, which is at present worth 20/ per fathom, and looking promising for further improvement. The lode in bottom of the level is 2 1/2 ft. wide, and worth for length of winze 20/ per fathom. The north carbons is worth 18/ per fathom, and Nos. 2 and 3 crossings are worth 10/ per fathom. At Goole Pellas we have no particular change, the recent heavy rains having somewhat retarded our operations.

**ST. AGNES CONSOLS.**—W. Vivian, Nov. 4: In the 73, driving east of north cross-cut, the lode is 3 ft. wide, worth 6/ per fathom. In the 72, driving east of south cross-cut, the lode is 3 ft. wide, producing some good tinstone. In the same level, driving west, the lode is 2 ft. wide, very kindly in appearance, producing tin and copper ores. The stope in the back of the 72 south are worth 6/ per fm. for tin. No change to notice in the 84 cross-cut, driving south of the engine-shaft, since last week. We hope to get the winze-engine to work next week.

**ST. DAVID'S.**—J. Jones, Nov. 4: Pantasa Shaft: As the wet weather continues I have not cleared the water from this shaft, but as soon as I see a change I shall do so, and set the men to work there.—Edward's Shaft: The men sinking this shaft had been forced to leave on account of the water, but now it has cleared, and they have resumed the sinking, which I hope will be completed to the required depth in a few days. The small rib of lead, mentioned before, continues to go down as they sink. The trench at the bottom of the level yields good lead in the south end; there is also very good lead in the rise from the level, which appears likely to turn out very well.

**ST. PATRICK.**—W. Francis, Nov. 3: The cross-course in the 90 yard level north still continues most encouraging in appearance, composed of fine gossan, and other congeal mineral compounds, with firm walls 4 ft. 6 in. between. I believe the main east and west vein is close to the end. The progress is very satisfactory here, and also in the 120 yard level cross-cut north, which occasionally yields specimens of lead ore and blende, and presents good features generally.

**SOUTH CARN BREA.**—Wm. Rich, Jas. Knotwell, Nov. 2: The engine-shaft is sunk nearly 12 fms. below the 160. We propose soon to drive east and west from the bottom of the shaft. The lode in the extreme bottom is about 4 ft. wide, and carries good stones of ore. The lode in the rise in the back of the 164 west will yield about 1 ton of copper ore per fathom. In the 164 end west the leading part of the lode is about 2 ft. wide, and carries stones of ore. There is an increase of water in this end, and the indications are such as to lead one to expect a speedy improvement. The 164 end east is poor, but the ground is easier for driving. The stope in the back of the 150, west of winze, is worth 7/ per fathom. The stope in the back of the 130, west of winze, is worth 30/ per fathom.

**SOUTH DARREN.**—James Boudry, W. H. Boudry, Nov. 1: The bargains throughout the mine maintain their value as reported on last, hence we have no special remark of any change. At surface the operations are being pushed on as fast as possible. We shall send out samples of another parcel of silver lead ore to-morrow (Tuesday).

**SOUTH GREAT WORK.**—S. J. Reed, Nov. 4: In the flat-rod shaft, below the 45, the lode is 3 ft. wide, worth for tin 10/ per fathom. We have a quantity of water in the winze below the 45, and until the shaft has further drained it probably we shall have to suspend it for a week or two; the lode is, however, worth 12/ per fathom. In the 35 west the cross-cut north has intersected the main part of the lode, which is worth 10/ per fathom, and improving. Better progress is being made in this level east since the winze has been communicated, and the lode is worth 7/ per fathom. We have now a fine stream of water for the stamping wheel, which saves the expense of fuel.

**SOUTH TOLCARNE.**—J. Vivian and Son, J. Paul, Nov. 4: In the 40 we have not yet reached the lode, but the change in the nature of the rock indicates that we are near it. In the 30, east of the cross-cut, the lode is 5 ft. wide, well defined, of good appearance, and yielding good specimens of black and grey copper ores. In the 30, west of the cross-cut, the lode is 2 ft. wide, of a favourable character, and yielding about 5 or 6 cwt. of grey copper ore per fathom. The heavy and continuous rains which we have had for some time have considerably increased the influx of water into the mine, but the engine keeps the drainage good with great ease, the rate of working being about three strokes per minute, and the consumption of coal about 18 cwt. in 24 hours.

**SOUTH WARD.**—R. Goldsworthy, Nov. 3: On Saturday, the 30th ult., we let the 90 cross-cut to drive by eight men, at 12/ per fathom; the ground is mixed up with capel, spar, and impregnated with munda, thus indicating we are near the lode. To drive the 72 south by eight men, at 8/ per fathom; the driving will be continued by the side of the lode, the ore bearing part being 2 ft. wide, producing some good stones of lead, and from its promising appearance we believe the end is extended the lode will be found more productive and lay open some valuable ground.

**TANKERVILLE.**—A. Waters, Nov. 4: Watson's engine-shaft is now 11 fms. 4 ft. below the 152, and we intend to go on sinking for another month, and drive out the 152. The winze in the 152, 17 fms. west of shaft, is down 6 fms., all the way in a rich lode. We are going down here in the centre (as far as width is concerned) of a rich deposit of lead, and I think we may calculate that at the 186 the ore course will be found to be 16 ft. to 18 ft. wide. In the roof of the 152, directly over said winze, the lode is 17 ft. wide, worth 200/ per fathom. Other points as for some time past.

**TAN-YR-ALLT.**—J. Davis, Oct. 31: The stope south of Treveltham's shaft continues to yield 2 tons of lead to the fathom; we have not touched the main portion of the shoot north. The lode in the No. 1 winze, east and west lode, where we have commenced driving east, contains a rib of solid lead about 1 in. thick, and a good mixture of lead throughout, producing altogether about 15 cwt. to the fathom. We shall sample 20 tons this month.

**TEESDALE.**—Thomas Watson, Oct. 28: Holmes's Level, North End: Nothing more has been done at this place since my report of last week, the men having been engaged laying rails. They will finish to-morrow, and commence to send out lead ore; we now have a direct road from the forehead north end to the dressing floor, all laid with iron rails.—Hopkins's Level: The vein here has improved much this week; the men brought some good bones out to surface yesterday.—South Level: Two men have commenced to clear the level out this week and lay the road with iron rails.—Dressing Floor: This will be ready for work to-morrow. I have taken three boys off the road, and have them sorting the ore.

**TRELEIGH WOOD.**—E. Hosking, W. Goldsworthy, Nov. 3: The shaftmen have commenced driving the 50 cross-cut north of the engine-shaft; the ground is favourable, and we expect to make good progress. The lode in the 40 east is producing a little copper ore, and is worth 7/ per fathom for tin. The stope above the 44 east is worth 9/ per fathom. The lode in the stope above the 44, east of Phillips' winze, is 8 ft. wide, and worth 17/ per cubic fathom. The lode in the 34, east of cross-cut, is improved, and now worth 30/ per fathom, and looks likely for further improvement. The lode in the stope below the 34 east is worth 13/ per fm.

**TREVRARACK.**—J. Pope, Nov. 3: There is no change worthy of remark in any of the bargains since my last report.

**TYLLWYD.**—J. Paul, Nov. 4: The cross-cut, south of the 30, is being driven with all possible speed; a little alteration has taken place in the ground in the last day or two, and some soft joints crossing the end, and water issuing freely from same; we consider this to be a favourable indication of being near the north part of the lode. We have let the cross-cut in the 20, to drive north, at 5/ per fathom; here we shall also push on as fast as we can in order to get into the south-west lode, when we expect to get into a good run of profitable ground. The lode in the 20, driving west of winze, is about 2 ft. wide, containing a little spar, and is settled with lead throughout, indicating a little tin in the last report. The stope are without any material change during the last week, with the exception of the eastern end of stope over the south-west level, which has improved. Pumping, drawing, crushing, dressing, and all surface operations are going on regularly, and in good order.

**VAN CONSOLS.**—James Roach, Nov. 4: The lode in the 40, east of main shaft has very much improved in appearance since my last advice. The forebreast contains blende and strong spots of lead ore throughout, which indicates close proximity to deposits of lead of importance. In sinking Macky's shaft under the level between the two productive veins, we have still been trying to get a north wall. To-day we picked a small hole into the south part of the lode, and found blende and stones of lead; therefore I do not think we are far off a course of ore. I may here remark that the south part of the lode has not yet been out through at any point under this level. All other work going on favourably, and the machinery throughout the mine in good order.

**WEST CHIVERTON.**—R. Southey, R. Nancarrow, Nov. 4: The winze below the 140, west of Batters' engine-shaft, has been just communicated with the 150 end, and a piece of valuable lead ground thereby opened up. The ends east and west of this winze, in consequence of being well ventilated, will now be pushed on as fast as possible, and from which we anticipate good results. Glubb's shaft: We hope to communicate with the 140 this week; and the sinking of Batters' engine-shaft and blende mine will be commenced at once. Our last month's sales of lead and blende amount to 28000, and cross-cut of 9000, per fathom, and leaving a profit of over 11000, on the month's working. Next Saturday is our four-weekly setting-day, when we will forward you a detailed report of our different points of operation, their value, prospects, and prices given.

**WEST CRAYEN MOOR.**—D. Williams, Nov. 4: Blackhill Level: This level is let to drive east upon the vein or lode to six men, at 180s. per fathom, the ground being more favourable for driving; the vein is about 6 ft. wide, composed of quartz, lime-spar, barytes, and fine spots of ore. Our prospects here are very encouraging for a good course of lead ore.—East Shaft: This shaft is let to nine men, at 15/ per fathom, including casing and dividing. The vein or lode in the bottom has improved since my last, and is from 4 to 5 ft. wide, composed of gossan, lime-spar, carbonate of lead, &c., and are daily expected to cut another course of ore. The one referred to in my former reports is standing west of shaft.—West Shaft: This shaft has been enlarged, timbered, and sunk during the month 8 fms., and is being carried down with all dispatch by eight men, and have 4 yards more to communicate the same with the course of ore, worth about 2 tons per fathom in the drainage below. The vein in the shaft is 2 ft. wide, containing quartz, lime-spar, &c., and worth about two blings per fathom of lead ore, being an improvement of one bling during the week. We have completed metal-house, also clearing the building floors, and are making the necessary repairs, and are settling on 10th the new water-course to supply the ground at Blackhill for dressing, as well as draining the surface water from Blackhill and Foxhole veins. I have also let a metal pit on surface at 58s. per bling, including raising and dressing.

**WEST ESKAIR LEE.**—John Davis, Nov. 4: I have let a bargain to 6 men to complete the sinking of the winze from the 10 to the 20, at 16/ per fathom. To cross-cut through the lode at the 20 west, with a view of driving parallel with the lode in that direction, to 4 men at 14/ per fathom; the lode here is very hard. Nothing appears to have been done in this direction before, but I fully believe from the indications on surface that the lode will be found valuable in this direction, some 12 fms. or 15 fms. west of shaft. The exceedingly wet weather we have had here of late, and some delay in the delivery of the necessary materials, has kept us back with the improvements at the western mine. We have, however, got all the materials on the spot now, and put a few extra hands on temporarily yesterday to get the work done. With the exception of the carpentry work, I have let all the other work, excavating and masonry, by contract. Excavating, 12/ 10s.; masonry, including raising and delivery of stones, at 2s. 6d. per square yard. Up to the end of October I had 4 men stoping in the big stope at the 10; and the lode appears to me to improve as it is extended eastward. We broke some very fine stones of blende there yesterday.

**WEST GODOLPHIN.**—J. Pope, Nov. 3: No important change in the mine since my last report last week. A full report will be sent for the committee meeting on Tuesday.

**WEST MILLWR.**—Wm. Francis, Nov. 3: Our progress during the past month has been very speedy, having driven over 6 fms. of the cross-cut south from West Meadow shaft. The ground continues good for driving, and I fully expect to cut

the main east and west lode before the end of the month, and which, I believe, will give good returns immediately.

**WEST TANKERVILLE.**—Arthur Waters, Nov. 4: The boundary shaft below the 63, is down 2 fms., ground favourable for progress. The 63 end, south of shaft, is driven 18 fms.; lode worth quite 30/ per fathom. The stope in back of this level is 5 fms. wide, and worth 25/ per fm. The winze in the 50, south (which is going down at a point 5 fms. in the mine are quite up to valuations in last report. We have to-day sampled 20 tons lead ore for sale next week.

**WEST WHEAL GORLAND.**—J. Mayne, Nov. 4: At our setting on Saturday last, we set the two ends, to drive east and west in the bottom of Messer's copper part; the value of these two points I will inform you in my next report. In the cross-cut, driving south, the ground is still changing for the better; we are enabled to set for 60s. per fathom less. The rise in the back of the 30 is worth 12/ per fathom; there is about 2 fms. more to rise to communicate with the level above, when the tin stuff will be brought away to a better advantage. No other change to remark on. Our sale of copper ore realised 47, 11s. 6d. per ton.

**WEST WHEAL TOLGUS.**—Nov. 4: The ground at Taylor's shaft is just the same as when last reported. The last pump for the lift is put on, but the men are again hindered, which I will explain below. The ground is still hard in the rise in back of the 125 east. We have taken the 85 end men and put them to clean out the 15 east to prepare to sink a winze towards the rise in back of the 125, in order to communicate these levels as soon as possible. The stope in back of the 125 are holding on very well. The lode in the 115 west is nearly all the width of the end, with a little ore, but hardly enough to value. The lode in the 95 end west is still very former reports, and the lode in the intermediate level, driving east, has improved, now yielding 3 tons of ore per fathom. The lode in the 85 west is 7 ft. wide, with good stones of ore, yielding about 1 1/2 ton per fm., and letting out so much water that the men are unable to work in the end, and the level over the 75 is nearly dry. The lode in the 75 west is just the same as that last reported, yielding 2 tons of ore per fathom. Richard's engine is idle, and has remained so since Tuesday afternoon. On Wednesday afternoon we examined the balance-bob, and found that it is done, and hope to set the engine to work this afternoon or evening, and that the engine will work better after this. The new steam-whim will be ready next week, so Mr. Hosking says.

**WHEAL AGAR.**—Nov. 4: The engine-shaft is being sunk by 12 men on a large lode, all of which will go to the stamps. As depth is attained there is a perceptible deposit of ore will be met with. The 165 cross-cut, north and south, are still in the lode. In the 170 cross-cut north a stream of water was cut to-day; the ground is easy, and composed of munda, mica, and peach, and every day we may expect to have a good lode. Altogether the prospects are very cheering, and no one can tell but that in a few hours discoveries will be made that will place the mine in a position most satisfactory to the patient and enduring adventurers.

**WHEAL CREBOR.**—J. Andrews, Nov. 2: There is no change in the 120 east. The lode in the stope in bottom of the 120 is worth 15/ per fathom. In the 108 east we continue to drive by the side of the lode. The lode in the 72 east is looking much the same as for several weeks past. The lode in the 45 east is 4 ft. wide, worth 30/ per fathom. The lode in the stope in the back of the 45 continues to look very well, and for half the length of the stope is worth 60/ per fathom, but the eastern part of the stope is not so good, and is worth 30/ per fathom.

—J. Andrews, Nov. 3: The lode in the 45 east has further improved, and is now 4 ft. wide, worth fully 25/ per fathom. There will be no further change here for ten days or a fortnight, as we have commenced to drive by the side of the lode. There is no change in the stope since yesterday.

**WHEAL GILBERT CONSOLS.**—J. Pope, Nov. 3: In the adit level, west of shaft, the lode is worth for tin 10/ per fathom. The stope in the back of adit, east of shaft, is worth 9/ per fathom. We have not put any lode or branch in the adit cross-cut since my last report, but there is still a large stream of water flowing from the end, from which we expect some lode or branch is near.

**WHEAL GRENVILLE.**—E. Hosking, Wm. Bennetts, Oct. 30: The lode in the 160, east of cross-cut, is worth 15/ per fathom. We have placed a pair of men in the 160 west, where there is a good lode, worth 15/ per fathom. The stope above the 160, east of rise, is worth 12/ per fathom. The lode in the 150, east of cross-cut, is worth 10/ per fathom. The stope below the 150, east of cross-cut, is worth 14/ per fathom. The stope above the 150, east of cross-cut, is worth 13/ per fathom. The lode in the 130, east of cross-cut, is worth 10/ per fathom. The lode in the 130 west is worth 9/ per fathom. The rise above the 130 is worth 10/ per fathom. The lode in the north shaft, sinking below the 130, is 2 ft. wide, producing a little tin. The lode in the 130, east of north shaft, is 18 in. wide, and worth 5/ per fathom.

**WHEAL KITTY (St. Agnes).**—Stephen Davey, Oct. 33: We have no change worthy of especial remark since last report.

**WHEAL PRUSSIA.**—R. Smethem, Nov. 4: The lode in the shaft sinking below the 20 is worth 25/ per fathom. The lode in the 30 west is worth 15/ per fathom.

**WHEAL TONY WOOD.**—J. Tremayne, Wm. Mayne, Nov. 3: The engine-shaft is sunk 9 fms. 2 ft. below the 60; in sinking the last 3 ft. the lode has improved in character, size, and value; it is now 2 1/2 ft. wide, composed of capel, quartz, copper, and tin ores, and worth about 15/ per fathom for the length of the shaft. The rise in the 60, east of shaft, is communicated with the winze from the bottom of the 50. In the 60, driving east of the rise, the lode is 4 ft. wide, and worth for tin 30/ per fathom. A stope west of rise, in the back of this level, is worth 25/ for tin and copper. The rise from the 60, west of the engine-shaft, is also communicated with a winze sinking from the bottom of the 50. The endmen are at present stripping down a piece of the lode east of communication; the lode at this point is 7 ft. wide, composed of capel, tin, and copper ore, and worth 40/ per fathom. The 60, both east and west of the engine-shaft, is now well ventilated, and a piece of good ground 50 fms. in length is laid open available for stoping. The 50 cross-cut, driving north of Harper's, towards Williams's copper lode, has not yet intersected the lode; the ground is getting of a much more mineralised character, with an increase of water. The tribute pitches throughout the mine are without any alterations to remark. Our pitwork and machinery are in good working order; water easy, about four strokes per minute.

**WHEAL TONY.**—Wm. Rich, M. Rogers, W. Rich, jun., Oct. 30: The lode in the 150, east of engine-shaft, is worth 7/ per fathom. The 150 end, east of Gooding's shaft, is unproductive. The 150 fm. level, west of incline shaft, is worth 12/ per fathom. The 140 end, east of King's shaft, is worth 12/ per fathom. The 130 fm. level, east is worth 10/ per fathom. The 120 east is worth 8/ per fathom. The 110 end east is worth 12/ per fathom. The winze sinking below the 100 east is worth 8/ per fathom. The rise in the back of the 40 west carries a little tin. We are obliged to put in a new piece of main-rod at the sump shaft, and make new balance-bob connection in the 70, and we hope soon to set the engine to work.

#### STREAM TIN DEPOSITS IN VICTORIA.

We have been favoured with the accompanying report upon the recently-discovered stream tin deposits in the colony of Victoria, Australia. Capt. Eddy was sent out last May to make a thorough investigation, and to see how much truth there was in previous reports by colonial surveyors, and the result is that he finds these reports had not overstated the extraordinary richness of the valley of the Latrobe river. We understand that a company has been formed in London for the purposes of working these deposits, and that the shares are being disposed of privately:—

#### SPECIAL REPORT OF CAPT. WILLIAM EDDY UPON THE VICTORIA STREAM TIN DEPOSITS.

GENTLEMEN,—I beg to hand you the following report. The tin mines on the Latrobe river, South Gippsland, colony of Victoria, are reached by a pack horse track 30 miles from Cannibal Creek, on the Gippsland coach road. I arrived here on July 3 last with a staff of miners. Our first work was to put in order two huts formerly used, and to cut tracks through a dense scrub on the leases. These leases have been surveyed by the Government surveyors. The surveys



With this week's Journal a SUPPLEMENTAL SHEET is given, which contains—Original Correspondence: The Mines and Mining Districts of Utah (B. A. M. Froese); the Great Fire in Virginia City; Cape Copper Company; On Mining in Tasmania (John Hunt); Imperial Brazilian Collieries; South Aurora Consolidated Company; Richmond Consolidated Mining Company; Foreign Mines and English Capital; Dynamite and Gunpowder; The Invention of the Safety-Lamp; Coal Mining in Scotland; Circular Ironclads; The Dowsing Rod; Gold in Flats; West Maria and Fortescue Mines; Cornish Mining—West Godolphin; Cornish Mining; East Caradon Mine; Mine Reports: Wheel Wrey, Ludcott, and North Trelawny Mines—Meetings of Public Companies: United Mexican, Imperial Brazilian, Santa Barbara Gold, Javali, Rookhope Valley, West Maria and Fortescue Consols, North Hendre, Willoughby—The Channel Steam Ferry—Foreign Mining and Metallurgy—Coal-Cutting Machinery—Spontaneous Combustion of Coal—Patent Matters, &c.

## The Mining Market: Prices of Metals, Ores, &c.

METAL MARKET—LONDON, NOV. 5, 1875.

COPPER.				IRON.			
Best selected...	per ton	£	s. d.	per ton	£	s. d.	per ton
Tough cake and tile.	89	0	0	0	0	0	0
Sheeting & sheets.	96	0	0	0	0	0	0
Boils	98	0	0	0	0	0	0
Bottoms	99	0	0	0	0	0	0
Australian, W. M.	92	10	0	0	0	0	0
ditto other brands	89	0	0	0	0	0	0
Chili bars, g.o.b.	81	10	0	0	0	0	0
Wire	per lb.	0	0	0	0	0	0
Tubes	per lb.	0	0	0	0	0	0
BRASS.				STEEL.			
Sheet	per lb.	0	0	per ton	£	s. d.	per ton
Wire	per lb.	0	0	Do., rolled	15	0	0
Tubes	per lb.	0	0	Do., in fagots	20	0	0
Yellow metal sheeting	per lb.	0	0	Do., in fagots	20	0	0
Sheet	per lb.	0	0	Do., in fagots	20	0	0
SILVER.				LEAD.			
Foreign on the spot	per ton	24	10	per ton	£	s. d.	per ton
to arrive	per ton	24	10	English, spring	18	0	0
ZINC.				TIN.			
In sheets	per ton	31	10	English blocks	£	s. d.	per ton
TIN.				Do., bars (in bris.)	90	0	0
English blocks	£	s. d.	per ton	Do., refined	90	0	0
Do., bars (in bris.)	90	0	0	Banco	90	0	0
Do., refined	90	0	0	Strals	84	0	0
Banco	90	0	0	Australian	81	10	0
Strals	84	0	0	TIN-PLATES.			
Australian	81	10	0	IC Charcoal, 1st qual.	£	s. d.	per box
TIN-PLATES.				IC Do., 2nd qual.	1	5	0
IC Charcoal, 1st qual.	£	s. d.	per box	IC Do., 3rd qual.	1	1	0
IC Do., 2nd qual.	1	5	0	IC Do., 4th qual.	1	0	0
IC Do., 3rd qual.	1	1	0	IC Coke	1	0	0
IC Do., 4th qual.	1	0	0	IX Ditto	1	0	0
IC Coke	1	0	0	Canada plates, p. ton	14	10	0
IX Ditto	1	0	0	Ditto, at works	14	0	0
Canada plates, p. ton	14	10	0				
Ditto, at works	14	0	0				

\* At the works, 1s. to 1s. 6d. per ton less. † Add 6s. for each X.  
Terns plates 2s. per box below tin-plates of similar brand.

REMARKS.—The state of the Metal Market generally is unfavourable, both in regard to the extent of business transacted and the tendency of prices, and it is perfectly evident that before any thorough and permanent resuscitation in trade takes place a long pause must elapse. The depreciation in quotations is one of the most telling indications of diminished trade, especially so just now, as there is almost a total absence of speculation; and, as there is really nothing immediately in prospect to lead to the expectation of better times, lower prices must necessarily follow. The shipping season to the Northern ports is fast drawing to a close, and we shall shortly enter upon the duller quarter of the year. The advices from abroad are very discouraging, and the commerce of the whole world seems out of joint. North America is only very gradually recovering from the crisis of 1873; all the principal cities of South America are financially bad; the Indian markets are unremunerative; and Australia has just passed through one of the worst seasons experienced for many years past. But, to look nearer home, take Egypt, Turkey, Spain, Germany, and Russia, they are all suffering more or less from bad trade and loss of credit. It will, therefore, be a long time before confidence can be restored and prosperity regained. All new undertakings of any magnitude, in the meantime, must be suspended, and even works in progress will be greatly retarded; with decreasing demand lower prices must prevail, and labour must also become cheaper. The only way to stimulate consumption is to make things cheap, and a low scale of prices at the present time would do more than anything else to bring back the demand. The money market is stiffening, and, although the requirements for business purposes are comparatively limited, yet, if the rate should be greatly advanced, it will naturally tend to create increased pressure, and prolong the depression of our markets.

COPPER.—The price of Chili bars does not vary much, and the rate has been particularly uniform for a considerable time past, the extent of the fluctuation being only about 1s. per ton. Our market keeps quiet, and although sellers do not press sales, buyers, on the other hand, limit their dealings to immediate requirements. Speculation has almost entirely subsided, and the market is left to take its own course, and is governed strictly by supply and demand. The charters for the last fortnight in October are 1900 tons. In English some further attempts are being made to revive the old association of smelters, for the purpose of combining together to make prices more remunerative; but this renewed effort will probably share the same fate in a short time as similar arrangements on all previous occasions, and fall to the ground without resulting in any benefit to anybody. Trade combinations are generally understood to be bad in principle, and do not work satisfactorily. It is surely far better to be free from all restrictions than to be bound down to certain fixed conditions, which all former experience proves will certainly hereafter be broken or evaded when it no longer answers to abide by them.

IRON.—The condition of our market has not undergone any change. As yet there is no relief to the monotony that has characterised it for so long a time past, and there is little in prospect at present to warrant the expectation of a speedy revival in the demand. The downward course of the market continues to make further progress, and to all appearances the minimum has not yet been reached. With the exception of slight fluctuations in pigs, and a trifling rally lately in the price of Welsh merchant bars, the downward tendency has been uninterrupted. It was thought ere this that business would have recovered, but all connected with the trade have been terribly disappointed, for instead of any visible signs of improvement, the state of our market is even worse than before. The long period of depression is becoming most exhaustive, and proving a severe strain upon the resources of ironmasters; no doubt many of the smaller houses will have to succumb, and close their works entirely until better times return. For rails there is very little enquiry, and prices are somewhat lower. From second-hand bars they have been offered as low as 6s. 15s., but even at this figure but few sales can be effected. In Welsh bars a fair amount of work is being turned out, and the makers of best brands are holding for better prices. In one or two instances they are pretty well supplied with orders for the next few weeks, at the same time it is very doubtful whether they will be able to realise the improved rates they are holding for, as North of England iron is cheaper, and it is impossible, while that is the case, for the Welsh houses to gain much advantage; besides, the makers in Wales of the common brands cannot obtain orders freely, and therefore any advance in the better descriptions will probably be only temporary.

In Staffordshire the makers seem a little undecided what to do; several of them are quoting more than before, not because there is any improvement in the demand, but simply on account of the announcement a short time since of a rise of 2s. per ton in coals. There are others, however, who are more urgently in want of orders, have made liberal concessions to secure them. Under these circumstances, therefore, it is not likely that an advance can be maintained, more particularly at this time of the year, when business invariably becomes more contracted. In Swedish bars, sales of Indian specification have changed hands at 15s., but the market is not active at this price. Scotch pigs have gained a little higher price; since last Friday, when the price was 60s. 9d., they have reached 62s., and to-day's price is 61s. 6d., m.n. cash.

SHIPMENTS.  
Week ending Oct. 31, 1875..... Tons 14,056  
Week ending Oct. 30, 1874..... 11,386

Decrease..... 2,670  
Total increase for 1875..... 83,776

The shipments this year compare favourably with last, but as stocks have increased, and will probably be added to, the statistical position is not so good.  
LEAD.—The market is dull, and as Spanish pig can be obtained more freely at lower prices, sellers of English have reduced their quotations. At present there is no perceptible improvement in the demand on account of this concession, and it would seem that a further diminution in value must ensue before any improvement will take place, as the condition of the shipping trade is unsatisfactory. Considering the depreciation still ruling in the prices of metals, it is rather remarkable that lead has continued so long to occupy so good a position. Holders have doubtless done tolerably well in comparison with others, and should now be careful to avoid upholding prices longer than the market will bear, and prevent, if possible, the mistake which so many sellers often fall into—that of allowing trifling difference in price to form an impediment to business.

QUICKSILVER.—This metal for some time past has occupied a doubtful position, and prices have taken a downward tendency. Holders appear to have no confidence in the future stability of the market, and it would, therefore, be surprising if buyers displayed any eagerness to avail themselves of the present reduced rate. The shipments to the East have been in sufficient quantities to meet the demand, and the only orders now coming forward are comparatively small, and at much lower limits, principally between 6s. and 10s. per bottle. Under these circumstances it is not improbable that sellers will have to make further concessions

to create an improved enquiry, and until then the market must remain dull and drooping. Second-hand parcels have been offering at 11s. per bottle, but this price meets with little or no response from the other side; 10s. has just been accepted from importers.

TIN.—All the week the market has assumed a quiet appearance, and the amount of business transacted has been of a limited character. To effect sales, sellers have had to submit to lower rates. Consumers continue to buy only from hand to mouth, and speculators are more disposed to operate for a fall. Straits forward delivery has been sold below cash prices. The state of the market seems to favour a downward movement, and it is not improbable that lower prices will soon follow. The deliveries and arrivals for the last month about balance, so that the stock remains unaltered. There are various reasons that combine at the fall of the season to render that period of the year more susceptible to a fall; and particularly this year, as the depression in trade may rather increase than otherwise. As the year draws to a close holders generally like to clear off their obligations, and consumers do not wish to increase their stock.

### THE IRON TRADE (Griffiths's Weekly Report).—Friday Evening.

There have been moderate fluctuations in the market for Scotch pigs this week, which closes this afternoon at 6s. 11d. buyers, being exactly 1s. more than the closing price this day week. We quote makers No. 1 iron as follows:—Gartsherrie, 72s. 6d.; Coltness, 77s.; Calder, 75s.; Langloan, 75s.; Summerlee, 70s.; Monkland, 64s. f.o.b. Glasgow; Glengarnock, 69s. 6d.; Eglinton, 63s. 6d. f.o.b. Ardrossan; Shotts, 74s. f.o.b. Leth; Kennel, 64s. f.o.b. Boness. We have no change to report in our market this week. The demand and fresh business done is generally in Yorkshire and Staffordshire iron of the best quality. The demand keeps up for Welsh bars of known good quality. The Blaenavon, and the Llynvi Tondy and Ogmore being in improved request; one of these firms are very well off for orders, although the rail trade is very stagnant, the Ebbw Vale Company have sufficient orders on their books to keep the mills running, and the Rhymer Company have this week an order for 4000 tons of rails for the Italian Government; with these exceptions the trade in Wales is very quiet, and not satisfactory for the masters. There is no change to notice in the tin-plate trade in the Principality. Orders are by no means brisk, but the makers intend one and all to abide by the firm determination expressed at the Gloucester Quarter day to reduce the make, and if necessary close some of the mills and pots to avoid working at a loss. The makers of hematite pigs on the West Coast are in a slightly improved position. The stocks by the late spurt at Millom and Carnforth have been considerably reduced, and heavy sales have been made by some of the smelters in this district into the beginning of next year. The West Cumberland Iron Mining and Smelting Company have eight blast-furnaces, five now in blast, and will blow another furnace in 14 days. The stocks at Barrow are considerably reduced.

In Shropshire the trade is brisk in sheet iron. This is the only kind which can be said to be in active demand here. The works in North and South Staffordshire are moderately employed. Market bars remain unchanged, perhaps firmer in price. Second-class iron in the South, owing to the advance of coal, is from 5s. to 10s. per ton dearer, and most of these makers have orders to keep the works running four or five days a week. Possibly only the houses who have been selling at very low rates will obtain the advanced price above referred to. Anyhow, the enhanced price of coal increases the cost of production in South Staffordshire all round. It was reported on 'Change at Birmingham yesterday that the Staffordshire sheet-iron makers held a meeting during 'Change hours and resolved to advance the price of sheet-iron 10s. per ton. We have had no official notice of this change yet. The sheet-iron makers in Staffordshire are all busy, and we should think this advance very probable. The advance in coal prices has the smelters in South Staffordshire in a very awkward position. They are now compelled to advance the price of native pig-iron from 5s. to 10s. a ton. There has been no official circular issued, but the smelters must either do this or blow out some of the furnaces. The Lilleshall Company have made no change in their price. The market for Scotch pigs has improved a little this week. The Middlesbrough market on Tuesday was weaker; prices down 1s. per ton.

### THE COPPER TRADE.

Stocks in Europe:—		Tons	
Chili ores and regulus, Liverpool and Swansea	441		
Chili bars in Liverpool	9,930		
Chili bars in Swansea	1,641		
Chili ingots in Liverpool	423		
Chili ingots in Swansea	—		
Foreign copper (chiefly Australian) in London	7,979		
English copper in London	50		
Chili bars and Barilla in Havre	2,725		
Other copper in Havre	875		
Afloat and chartered from Chili to Europe (advised by mail):—			
Ores and regulus (equal to fine)	5,274		
Bars and ingots	4,527		
Afloat from Australia (advised by mail):—			
Fine copper	1,010		
Afloat and chartered from Chili to Europe (advised by cable):—			
Fine copper	2,900		
Total	37,275		

London, Nov. 1. HENRY R. MERTON AND CO.

Since our last report English consumers of Chili bars have but sparingly supplied themselves, and the continental demand has been almost nil, owing to the fact that manufacturers there have supplied their requirements from imports direct from Chili, prices have, however, been fairly maintained, and there is little change to notice in our quotations of a fortnight ago. Arrivals here (Liverpool) during the fortnight of West Coast, S.A., produce have been—Sorata, from Valparaiso, 334 tons bars, and 280 tons ingots; Prince Arthur, from Valparaiso, 15 tons bars; Norsemann, from Valparaiso, 64 tons bars; Wood Hall, from Valparaiso, 20 tons bars; Dunderland, from Valparaiso, 22 tons bars; Corcovado, from Valparaiso, 666 tons bars.—At Swansea: Atossa, from Carrizal, 710 tons regulus. Stocks of copper (Chilian and Bolivian) in first and second hands, likely to be available, we estimate at:—Ores, Regulus, Bars, Ingots, Barilla.

Liverpool..... 979..... 11,571..... 423.....  
Swansea..... 979..... 1,641..... —.....  
Total..... 979..... 11,571..... 423.....  
representing about 12,435 tons fine copper, against 12,510 tons Oct. 15; 12,700 tons Oct. 31, 1874; 22,500 tons Oct. 31, 1873; 20,700 tons Oct. 31, 1872. Stock of Chili copper in Havre, 2725 tons fine. Stock of Chili copper afloat and chartered to date, 11,000 tons fine.—Liverpool, Oct. 30. HARRINGTON, HOBAN, AND CO.

Chili is in about the same position as last week, with buyers at 82s. and sellers at 82s. 5s. to 82s. 10s. for cash g.o.b. The charters are not published at the moment of writing, but a rumour is afloat of their being about 1900 tons, which causes a rather firm feeling in the market, no great desire being apparent to either buy or sell. All that can be said of present rates is that they are moderate, and no considerable movement can be expected in either direction. The price of g.o.b. for Nov. 1 for 4 years shows a fluctuation of only 3s. 10s. per ton. The week's business was 700 tons g.o.b. and named marks at 82s. 5s. to 82s. 10s. cash. 17, Gracechurch-street, Nov. 6. ERNEST W. S. MURRAY.

Nothing doing in furnace material, either by public sale or private contract. There has been a tolerably fair demand for bars during the week, but the enquiry chiefly ran on named and picked brands, for which buyers have had to pay rather long prices as compared with ordinary unspecified marks. The present figures show a loss on importations into this country, and this feature has ruled near the close of the year, the instances being quite exceptional wherein merchants have been able to realise a profit on the rate paid by them on the other side. Australian descriptions continue to be neglected, but the quantity offering for sale is so limited that no reduction worth mentioning has occurred in the quotations. English sorts are steady, with a slightly upward tendency, and smelters are unable to give prompt delivery of manufactured, whether in India sheets or other work.—Austinfriars, Nov. 6. JAMES AND SHAKESPEARE.

Chili bars have been in moderate demand during the month, with very trifling fluctuations. Ordinary brands, chiefly Lots, sold at 82s. to 82s. 10s., Urmeneta 82s. 5s. to 82s. 15s., and special 82s. 15s. to 82s. 10s. The purchases by the Trade have been solely for carrying on a hand to mouth business, and neither has a succession of moderate charters advised from Chili, nor the continued maintenance of a steady price, caused any deviation from this line of policy. The total absence of speculation adds to the apparent lifelessness of the situation; meanwhile consumption goes steadily on, and no important accumulations of stock occur to shake confidence in the present values. This article should therefore be well situated for participating in any improvement arising from a better state of trade throughout the country.

117, Leadenhall-street, Nov. 5.

### THE TIN TRADE.

Our tin market has been quiet in the extreme during the month now under review. Our prices, although well maintained by operators for a rise, have certainly curtailed the consumptive demand, and bona fide transactions have been limited in consequence. Banca has been slow of sale, and after fetching occasionally 53s. in the beginning of the month, we close with sellers at 52½s. In contrast for delivery, or November sale, a limited business has taken place from 53s. to 52½s. Billiton in the spot has moved off slowly at prices varying from 50½s. to 50½s. There are now sellers at the first-named figure. Subsequent to the Batavia sale a few parcels for forward delivery changed hands at 51s. A decline of ½s. has since been established; 10,000 peculs Billiton offered in public sale at Batavia, on Oct. 11, fetched the average price of 54-87½s., costing to sell here about 50½s. by steamer. Next sale, comprising the same quantity, is advertised for Dec. 13. The position of Banca tin in Holland on Oct. 30, according to the official returns of the Dutch Trading Company, was:—

1875.		1874.		1873.	
Import in October	66,997	130,765	175,315	175,315	175,315
Total ten months	10,132	13,655	21,269	21,269	21,269
Deliveries in October	109,036	113,185	116,688	116,688	116,688
Total ten months	20,297	14,398	22,982	22,982	22,982
Stock second-hand	72,821	137,802	136,611	136,611	136,611
Unsold stock	93,118	142,200	159,593	159,593	159,593
Afloat	7,950	6,000	5,187	5,187	5,187
Statements of Billiton:—					
Import in October	4,200	—	3,000	3,000	3,000
Total ten months	70,942	70,456	62,900	62,900	62,900
Deliveries in October	9,628	8,125	13,050	13,050	13,050
Total ten months	75,038	71,470	60,100	60,100	60,100
Stock	27,107	24,206	17,653	17,653	17,653
Afloat	16,000	12,000	4,297	4,297	4,297
Quotation Banca	52½s.	57½s.	73s.	73s.	73s.
Oct. 30. Billiton	50½s.	55s.	72s.	72s.	72s.

These combined returns of Banca and Billiton for 1875, compared with those for 1874, exhibit:—An increase of the import for October of 119 tons; a decrease of the import for the ten months of 1667 tons; a decrease of the deliveries for October of 83 tons; a decrease of the deliveries for the ten months of 16 tons; an increase

of the stock second-hand of 275 tons; a decrease of the unsold stock of 1718 tons; a decrease of the total stock of 1443 tons; a decline of the quotation of Banca of 8s. 6d. per ton. The Government Returns for the month of August are as follows:—

EXPORT OF TIN FROM HOLLAND.		Eight Months.		1875.		1874.		1873.	
Germany	1875.	1874.	1873.	1875.	1874.	1875.	1874.	1875.	1874.
Tons	383	293	161	2778	2231	2038	2038	2038	2038
England	44	18	76	430	274	1118	1118	1118	1118
Belgium	160	203	36	1165	1115	887	887	887	887
France	27	44	6	283	275	364	364	364	364
Hamburg	60	51	8	269	288	196	196	196	196
United States	—	—	—	—	—	—	—	—	—
Other countries	82	114	33	467	274	136	136	136	136
Total	736	723	320	5455	4473	4543	4543	4543	4543

Rotterdam, Oct. 30. EBERLING AND HAYEKAAR.

There is evidence in the large deliveries (1300 tons) that the requirements continue very considerable; on the other hand, the arrivals during the past month have been sufficient to prevent any reduction in the stock here. Should the demand continue steady at current rates, it is probable that the statistical position will improve later on, as the floating Australian will not be available in any quantity till the beginning of next year, while it is not thought likely that the heavy receipts during the first four months of this year can be repeated, at any rate as regards Australian supplies. Prices have shown but little fluctuation during the month, and close about 20s. lower all round, with a quiet market. English tin being relatively dearer than Foreign, has been almost entirely neglected.—Nov. 5. VIVIAN, YOUNGER, AND BOND.

The anticipated advance in the value of this metal did not occur in the past month, but prices both of Straits and Australian have rather receded. Quotations are 10s. to 20s. lower, but the amount of business transacted is very small, and no large parcels on the spot are to be had below 85s. 10s. to 86s. Shipments both from the Straits and Australia continue small, and with the monthly deliveries still making consumption appears likely to overtake the supply. There has been no speculative enquiry throughout the past month, or prices would probably have further advanced. HENRY ROGERS, SONS, AND CO. 1s. per box.—Nov. 5.

The small fluctuations in values during the past month, and the entire absorption of our heavy arrivals, point to absence of speculation and a very large consumption of this metal. The total supplies of the year will show a very increase, but holders are still confident that the present low range prices will eventually have great effect upon production. The shipments from the Straits were moderate during October, viz., 400 tons, and those from Australia are variously computed from 500 to 600 tons.—Nov. 5. FRENCH AND SMITH.

We note a slight decline in English, the enquiry for which is still below the average. Straits and Australian have been dealt in on a tolerably large scale; contrary, however, to general expectations, no rise has occurred in either sort, and it would seem that those operators who had sold for delivery at the close of last month were able to borrow sufficient metal to meet their requirements, without being compelled to supply their wants in the open market. Some doubt exists as to the quantity of Australian now afloat for this country, but in any case the importation during remainder of the year will be on a very limited scale, and no arrivals are expected to occur during November. JAMES AND SHAKESPEARE. [Next week we shall give Messrs. James and Shakespeare's statistics.]

There has been a fair demand for one or two mines, and at better prices, but, on the whole, the MINING SHARE MARKET this week has been dull.

The mines chiefly dealt in have been West Chiverton, Tankerville, Roman Gravel, West Tankerville, Wheel Grenville, Wheel Crebor, Parys Mountain, Marke Valley, Great Wheel Vor, Pateley Bridge, Great Laxey, Carn Brea, Dolcoath, Pennerley, Wheel Agar, Wheel Peavor, South Condurrow, and a few others.

At the Redruth Ticketing, on Thursday, 2201 tons of copper ore fetched 11,483s. 8s., or an average of 5s. 4s. 6d. per ton; the average standard was 113s. 12s., and the average produce 7, there was consequently an advance in the standard as compared with last sale of 5s.

West Chiverton shares have advanced to 17s. 18s.; the sales of lead ores on Oct. 23 realised 1646s. 15s., the best parcel (60 tons) realising 18s. 7s. 6d. per ton; the second (70 tons), 7s. 15s. 6d. per ton. The blends sold on Oct. 30 realised 1218s.—70 tons, at 5s. 11s.; 140 tons, 3s. 18s. 6d.; 80 tons, at 2s. 14s.; and 40 tons, at 1s. 12s. Total amount of sales, 2864s. 15s. Tankerville, 10½ to 11; the directors have declared a dividend of 5s. per share. In the roof of the 152 the lode is worth 200s. per f



worked to a depth of 40 fathoms, when overcome by water." Until the mine had been unwatered, which could not be done until the necessary appliances had been obtained from San Juan, Mr. Coward could not forward a detailed report. From Aug. 27 to Oct. 2 he busied himself in this work, the result of which has been the announcement that the vein has gone down in the sole of the bottom level of an average value of 2½ ozs. of gold per ton, that Mr. Coward had himself raised and stamped a sufficient quantity to be satisfied that such will be the practical result in working, that returns can be made at an expense not exceeding 30s. per ton, and that the erected machinery as soon as put in order is capable of reducing no less than 1000 tons per month; 189 tons (from the bottom of the mine) have yielded 486 ozs. of gold, which realised 34.10s. per oz.: the market closes 54 to 53.

Foreign Gold Quartz Shares remain steady, with a tendency towards higher prices in the more popular stocks. St. John del Rey has improved to 395, 405; the return for the second division of October (11 days) being 20,000 oits., yield 8.9 oits. per ton value 77504; this is a good improvement on the first division of the month, and if the remaining 11 days of the month give a similar result, the aggregate produce for the month will be 55,000 oits., which should leave a profit of about 14,000. The dividend at Christmas, it is reported, will be 25 per cent., or at the rate of 50 per cent. per annum. All the stamps are in full work, and are being adequately supplied with rock free from kills. Don Pedro, 1 to 1½, and more enquired for; Chontales, 1 to 1½; Javali, 9-16ths to 1-16ths; Frontino and Bolivia, 1½ to 1; Almada and Tiro, 1 to 1½; Sierra Buttes, 1½ to 1; do. Plumas Eureka, 1½ to 1½; London and California, 1 to 1; Independence, 1 to 1; Port Phillip, 1 to 1.

Silver mines have been depressed, in sympathy with the heavy decline in Richmond shares; a further fall has taken place during the week of 17. 5s. per share, the lowest quotation was 6½ to 6½, but after several fluctuations a rally took place, and the closing price was 6½ to 6½. Cablegram received: "Week's run, \$41,000; re-lining. Nothing new in mine. Sinking shaft." The make of bullion for the season is \$1,112,000, and since February \$1,331,000. The refinery this season has produced gold and silver bars to the value of \$765,000, irrespective of the lead. The timbering in the main hoisting shaft being completed, sinking in that is again resumed, and a depth of 800 ft. is nearly attained. The drift from this shaft at the 700 ft. level started to intersect the main lode, has it appears struck good ore earlier than was expected, which appears to be of the character of a string, probably from the lode or some chamber in connection with it. As the cablegram in our last week's Journal announced that the "700 ft. drift was looking well," the opinion as to this discovery announced in the manager's letter appears to be well grounded. The winze below the 600 level is being sunk outside the lode, in order to obtain better ventilation, and the cabled news on the 21st was that a drift from this winze at 50 below the 600 level had struck ore. The new hauling-engine will shortly be fixed, and a power at command of hauling from 2000 ft. This extra power has been needed sooner than was expected, and until it is applied the ore in the lowest workings is not accessible for use, neither can the extent of the new reserves below the 600 level be ascertained, as no drifts or cross-cuts could be run till the hauling power is increased. Eberhardt and Aurora, 8 to 8½; the directors announce that the first shipment of bar silver, value 75000, is to hand.

United Mexican, 2½ to 3; at the meeting, on Wednesday, reported in another column, it appeared that during the past financial half-year the excess of outlay on the old concern had been \$15,484, reduced by payments of \$3319 by the original owners to \$12,165 on account of the company. The latest advices state that the vein in the "new concern" was looking a little better; some assays gave 3 marcs, but the average was not so high; the vein was well-packed, and looked more favourable. Emma, 1½ to 1½; the reports, to be submitted at the meeting, on Wednesday, are referred to in another column. Flagstaff, 11-16ths to 13-16ths; Last Chance, 1 to 1½.

Hydraulic Gold Mines have been dealt in to a moderate extent. Sweetland Creek, 2½ to 2½; Mr. G. D. McLean reports that he is washing with all the water he can command. The supply as yet has not much slackened, and may possibly continue without much decrease until the rains set in. Cedar Creek, 1 to 1½; the superintendent has ceased all work except the Yankee Tunnel, which he is running ahead with as much speed as possible, but at present the progress is slow, owing to a short supply of water to work the machinery. Birdseye Creek, 1½ to 1½; the agent is pushing on with the work required to be in readiness for water, and is looking forward to a good season. Oregon (pref.), 4 to 4½; capital progress is being made in the tunnel and ditches, and the whole will, it is expected, be completed early this month. The superintendent says that he intends to start the coming season with three monitors, and is confident that the results will satisfy all the shareholders. Blue Tent, 4½ to 5; the remaining work, such as the distributing reservoir, &c., is being rapidly completed, and matters are assuming good shape for the coming season.

Lead Mines have been active, and a large business recorded. Van, 2½ to 2½; the 60 fm. level west is improving, and the ore ground is lengthening considerably as depth is attained. The 75 west maintains its value—90¢ per cubic fathom. The 90 west is worth 80¢ per cubic fathom, and the same level east 50¢. No other alteration. The usual quantity of ore will be sampled next week. Pateley Bridge shares continue firm at 6½ to 6½; the lode in the 20 cross-cut west fully maintains its value of 80¢ per fathom, and the manager is of opinion it will still further improve. Attention has been already directed to the fact that the eastern part of the mine is drained 60 fathoms below the present workings, and that the lodes have gone down rich in this portion of the mine. The rails will be completely laid during the next month, when, after many years suspension, the driving of this level will be resumed. The mine generally continues to look well. Port Nigel, 1½ to 1½; the mine is opening out in a most satisfactory manner, and all that is required is to provide dressing machinery adequate to the present output; the monthly return of 40 tons will then be increased to 70 or 80 tons. A parcel of 65 tons has been shipped this week.

Grogwin, 3 to 3½; the main shaft, which been several years sinking, is now within 10 fms. of completion, and when finished will enable the executive to increase the returns to probably 100 tons of lead per month. The intermediate level has improved; this month's sale of 70 tons realised 144. 13s. per ton. Wye Valley, 4 to 5; the 22, driving towards the rich ore ground in the 10, is yielding lead, with a promising lode; discoveries are shortly expected at this point; 40 tons of lead will be sampled to-day. West Wye Valley, 3 to 3½; the works are being pushed forward vigorously. The purchase has been completed, and the shares allotted. West Goginan, 1½ to 2; Llanidloes Lead, 3 to 3½; ore is now being raised on tribute at 6¢ per ton, which will leave a good profit. Melindur Valley, 1½ to 2; the lode at the main shaft and 26 fm. level continues to improve. South Cwmystwith 1½ to 2; lead is being raised. The ground is rather hard, and progress, consequently, comparatively slow. Bog, 5-16ths to 7-16ths; the sinking of the engine-shaft below the 175 is making fair progress. There is no change of importance at the mine. Pennerley, 1½ to 1½; the lode in the 120 west is considerably improved, and apparently just entering a run of ore ground. The end is worth 1 ton of lead per fathom. At Potter's Pit the sinking of the shaft below the 75 is steadily proceeding. The value of the winzes remains as last reported. The company have this week sampled 80 tons of lead and 15 tons blende.

New Quebrada, 3½ to 3½; the report to be submitted at the forthcoming meeting states that since last meeting the directors have kept steadily in view two great aims—the development of the mines, and completion of the railway works—and they have not failed strongly to impress upon the Bolivar Railway Company the great importance of the fulfilment of the latter object. The latest accounts from Venezuela in both these respects are favourable; and the contractors are assured that the locomotives would reach Yumare, 35 miles from the sea coast, by the end of last month. The earthworks to La Luz (within five miles of the mines) it was expected would be completed by the same time. The superintendent at the mines expresses confidence that he will be able, without difficulty, to supply at the proper time the quantity of ore required for fulfilment of the company's contract with the railway company.

The result of the many assays of the ore made from time to time justifies the opinions formerly expressed as to the quality of the mineral.

Great Wheel Vor, 2½ to 3½; the lode in the shaft has been slightly disordered by a string of quartz coming in from the north wall of the shaft; but the latest information is to the effect that the quartz is wearing out and the lode resuming its former character. The 40 and 70 maintain former reported value.

Subjoined are the closing quotations:—  
Ashcroft, 1½ to 1½; Bog, 5-16th to 7-16th; Carn Brea, 50 to 52; Devon Great Consols, 3½ to 4½; Dolcoath, 44 to 46; East Caradon, 13½ to 14; East Lovell, 6 to 7; East Van, 1½ to 1½; Exchequer Gold, 1½ to 1½; Great Laxey, 15½ to 16½; Great Wheel Vor, 2½ to 3½; Hingston Down Consols, 1½ to 1½; Marke Valley, 2½ to 3½; Pateley Bridge, 6½ to 6½; Parys Mountain, 1½ to 1½; Pennerley, 1½ to 1½; Penrithal, 1½ to 1½; Roman Gravel, 12½ to 12½; Tankerville, 10½ to 11; Tineroff, 23 to 25; Van, 27½ to 28½ (ex div.); Van Consols, 1½ to 1½; West Basset, 5 to 5½; West Chiverton, 17½ to 17½; West Esclair, 1½ to 1½; West Tankerville, 1½ to 1½; Wheel Greenville, 3½ to 3½; Birdseye Creek, 1½ to 1½; Blue Tent, 4½ to 5; Cape Copper, 34 to 35; Cedar Creek, 1½ to 1½; Eberhardt and Aurora, 8 to 8½; Emma, 1½ to 1½; Flagstaff, 11-16th to 13-16th; Last Chance, 1 to 1½; Malpas, 1½ to 1½; Malabar, 1½ to 1½; New Quebrada, 3½ to 3½; Oregon (pref.) 4 to 4½; Rica, 1½ to 1½; Richmond Consolidated, 6½ to 6½; St. John del Rey, 395 to 405; San Pedro, 1½ to 1½; South Aurora, 6s. to 8s.; Sweetland Creek, 2½ to 2½; Tecoma, 1½ to 1½; United Mexican, 2½ to 3.

HALIFAX SHARE MARKET.—Thursday: The following quotations are from Mr. J. H. Thackrah's list:—Halifax and Huddersfield Union Bank, 30; Halifax Joint-Stock Bank, 28; Halifax Commercial Bank, 24½; London and Yorkshire Bank, 33s. 6d.; John Crossley's, 13½; Whitworth and Co., 9; Elland Gas, 20; Rastick Gas, 18½; Bradford Brick and Tile, A, 24; B, 7½; Charlestown Brick and Tile, 9½; Ripponden Commercial, 12½; Hebden Bridge Cotton, 10; Yorkshire Boiler Insurance Company, 21s.; Norton Brothers, 9½.

At Redruth Ticketing, on Thursday, 2201 tons of copper ore were sold, realising 11,483. 8s. 0d. The particulars of the sale were:—Average standard, 113. 12s.; average produce, 7; average price per ton, 5. 4s. 6d.; quantity of fine copper, 154 tons 8 cwt. The following are the particulars:—  
Date. Tons. Standard. Produce. Per ton. Per unit. Ore copper.  
Oct. 7. 1483. 115 11 0. 6½. 25 0 6. 14s. 9d. 273 14 0  
" 21. 2225. 115 1 0. 6½. 5 2 6. 15 0. 74 17 6  
Nov. 4. 2201. 113 12 0. 7. 5 4 6. 14 10½. 74 8 0  
Compared with the last sale, the advance has been in the standard 5½, and in the price per ton of ore about 6s. 8d.

The THERMO-ELECTRIC GENERATOR COMPANY have now completed the necessary arrangements for showing their improved thermometric piles in regular operation in London; and as the pile has already given the greatest satisfaction wherever applied, its extensive adoption may be looked forward to. Mr. Clamond's discovery, the result of years of experiment and labour, by which he has been able to perfect his thermo-electric pile, appears to solve the problem of producing cheap electricity on a practical scale. The Clamond pile is constructed of metals having great electric properties. The electricity is given out without any intermediate agency. Fuel alone, such as gas, coke, charcoal, is consumed. The economy in maintenance is very considerable in comparison with other batteries, and the current obtained is constant, and free from polarisation or exhaustion. The superiority of the Clamond Pile over other batteries for electroplating and electrotyping purposes has been practically demonstrated by its adoption in France in the Ministry of War, the Mint, the Bank of France, School of Mines, &c., in the ateliers of Messrs. Goupil, Christoffe, and other industrial institutions; whilst its value and economy in telegraphy have been placed beyond question by the result of many months' working at the Exchange Telegraph Company's office in Bartholomew House, where the pile has superseded all other batteries previously in use. The invention will be more fully referred to on a future occasion.

TANKERVILLE.—The directors have declared a quarterly dividend of 5s. per share (30000), payable on the 19th inst. The mine is looking exceedingly well. The winze below the 152, 17 fms. west of shaft, is down 6 fms.—all the way in a rich lode, which in the next level (the 162) it is estimated will be found 16 to 18 ft. wide. In the roof of the 152, directly over this winze, the lode is worth 200¢ per fathom.

WEST CHIVERTON.—In another column will be found the details of sales of ore made during the past month, and realising upwards of 28600, of which 16464. 15s. was from lead ores, and 12184. from blende. This will leave a profit for the month of about 12000, and it could be wished that many other mines upon the market could show equally gratifying results.

BLACK ROCK COLLIERY.—The works are being pushed on with all speed, with a view to enlarging the output as quickly as possible, and it is anticipated the quantity raised per week will be doubled in the course of another three months. With so many advantages as this colliery possesses in situation as to market, quality of coal, &c., the company should do well, and with the probability of a speedy rise in the price of coal the shares should advance in value.

#### PATELEY BRIDGE LEAD MINES AND SMELTING COMPANY (LIMITED).

MESSRS. F. W. MANSELL AND CO. (SWORN BROKERS) are in a position to afford the LATEST INFORMATION from these VALUABLE MINES, and strongly recommend the immediate PURCHASE of the SHARES. BLUE TENT, OREGON, RICHMOND, EBERHARDT, ARGENTINE GOLD. See page 1219 in to day's Journal.  
F. W. M. and Co. have Special Business in Argentine Companies' Shares.  
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#### TO ENGINEERS.

AN ENGAGEMENT WANTED, by a Young Gentleman (aged 25), in some ENGINEERING or SCIENTIFIC EMPLOYMENT. The advertiser has had experience in the shops and drawing office, and management of men, also a knowledge of surveying and mechanics.  
Address, "Wray," MINING JOURNAL Office, 28, Fleet-street, London.

WANTED, A COMPETENT MINING ENGINEER, to ACT as ASSISTANT MANAGER in the MINING DEPARTMENT of the RIO TINTO SULPHUR AND COPPER MINES, in SPAIN. Knowledge of the Spanish language indispensable.  
Apply, stating full particulars, to the Company's Offices, 2, Copthall Buildings, E.C.

WANTED TO PURCHASE, A FEW SHARES in the SWANSEA COLLIERIES COMPANY (LIMITED), and the YNSCEDWYN COLLIERY COMPANY (LIMITED), or any other SWANSEA COLLIERIES or IRONWORKS.—Quote lowest price and number to "J. V. Y." 51, Sharncliffe-road, New Cross, S.E.

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WANTED TO PURCHASE, in small or large quantities, up to 2000 tons. State strength, and lowest price delivered on rail or board of ship, to W. BOUSTRUP, Barytes Manufacturer, Yockleton, Salop.

WANTED, £5000 for HALF OF SLATE QUARRY, in GOOD WORK. Cleared 50 per cent. last year; quality good. London orders to June booked; been at work two years. Or 10 per cent. will be PAID for a LOAN of £7000, repayable in instalments in four years. Carriage to London easy; close to ship. Book will bear the strictest investigation. No royalty; low rental. None but principals need apply.  
Address, "J. S. F." Post Office, Dartmouth.

A GENTLEMAN, with £2000 to £3000, may MEET with a GOOD COLLIERY PARTNERSHIP. One who can take charge of the office department and sales preferred.  
Address, JAMES COPE, Mining Engineer, Copeland street, Stoke-upon-Trent.

A GENTLEMAN, who has taken his highest degrees in a School of Mines abroad, and who has since had several years of experience in Mining in England and other countries, of thorough competency both in underground and surface surveying, levelling, designing, good draughtsmanship, with a fair knowledge of analytical chemistry; speaking English, French, and German; wishes EMPLOYMENT in the capacity of a CIVIL and MINING ENGINEER to a company or to an engineer. First class references and testimonials.  
Address, "Delta," MINING JOURNAL Office, 28, Fleet-street, London.

COAL WAGONS FOR SALE.—EIGHTY (8-ton), in good repair, now running on the Great Western Railway.  
Address, "Wagon Company," care of C. Mitchell and Co., Advertising Agents, Red Lion-court, Fleet-street, London, E.C.

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#### BRITISH LEAD MINES.—

Will shortly be published, price 1s. 6d.,  
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A Pamphlet on BRITISH LEAD MINES, together with the following MAPS, showing the position of the principal LEAD MINES, &c., &c., specially prepared by Mr. MURCHISON:—  
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ROYAL SCHOOL OF MINES, JERMYN STREET.—  
MR. WARINGTON W. SMYTH, M.A., F.R.S., will COMMENCE A COURSE OF SIXTY LECTURES ON MINING, at half-past Three on Monday next, the 8th of November, to be continued at the same hour on each succeeding Tuesday, Thursday, Friday, and Monday. Fee for the course, £4.  
TRENHAM REEKS, Registrar.

#### THE BLUE TENT CONSOLIDATED HYDRAULIC GOLD MINES OF CALIFORNIA (LIMITED).

The company, having completed their aqueduct, 30 miles in length, is PREPARED TO RECEIVE APPLICATIONS for its TWELVE PER CENT. DEBENTURES, repayable in five years.  
For particulars, apply at the offices of the company, 14A, Austinfriars, London, E.C.

#### PONTGIBAUD SILVER-LEAD MINING AND SMELTING COMPANY.

The ORDINARY ANNUAL GENERAL MEETING of the Shareholders of the above company will TAKE PLACE in Paris, at the offices of the company, No. 15, Rue de Chateaudun, on TUESDAY, the 30th day of November instant, at Three o'clock P.M. precisely.

The qualification to take part in this meeting is the holding of 20 shares, which must be deposited at the offices of the company in Paris, or at the Agency, in London, ten days before the meeting takes place. Shareholders may be represented by proxies at the meeting; but no one can be the bearer of a proxy unless he himself is the owner of 20 shares.

Proxies must be upon French stamped paper, and according to the form, which can be obtained at either of the offices of the company.  
JOHN TAYLOR AND SONS.  
London Agency, No. 6, Queen-street-place, E.C., Nov. 4th, 1875.

#### THE NEW QUEBRADA COMPANY (LIMITED).

Notice is hereby given, that an ORDINARY GENERAL MEETING of this company will be HELD at the City Terminus Hotel, Cannon-street, on MONDAY, the 22nd November, 1875, at One o'clock P.M., for the purpose of receiving the directors' report, with balance sheet and statement of accounts, for the election of directors and auditors, and for transacting the ordinary business of the company.  
By order of the Board, T. G. GILLESPIE, Secretary.  
11, New Broad-street, E.C.

#### TANKERVILLE MINING COMPANY (LIMITED).

Notice is hereby given, that the directors of the Tankerville Mining Company (Limited) have THIS DAY DECLARED A DIVIDEND OF FIVE SHILLINGS (5s.) PER SHARE, free of income tax, payable on and after 15th inst.  
Notice is also hereby given, that the Transfer Books of the Company will be closed from the 8th to the 19th inst., both inclusive.  
By order of the Board, J. H. MURCHISON, London Manager.  
8, Austinfriars, London, 2nd November, 1875.

#### THE SILVER CROSS MINING COMPANY (LIMITED).

Capital £5000, in 5000 Shares of 20s. each, fully paid.

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This mine is situated in the parish of Perranuthnoe, near Marazion, in one of the most profitable districts for copper and tin mining.  
The sett is extensive, and contains several copper and tin bearing lodes, and is surrounded by many rich mines, the lodes of which run through this property. The stratum is killas, and is crossed by large veins and cross courses—a very important feature in mining. The mine is for a great extent unexplored to the west of a large elvan course, where it is proposed to drive a cross-cut, and where it will intersect several lodes at a depth of 40 fms., with almost certain rich results.  
Captain Richards says—"The undertaking is such as every experienced miner would strongly recommend, and it is my opinion that a very valuable course of copper as well as tin will soon be laid open near the elvan course, and it is under such circumstances the best discoveries of minerals have been found."

Capt. J. Pope writes—"I can strongly recommend this undertaking as the right kind from which to expect profitable mining."  
Detailed reports of Capts. Grundy, Richards, and Pope, and forms of application for shares may be had from the offices as above.

The lodes in New Caroline Mine, running through this property, are opening up most promisingly, and only 15 fms. from surface.  
The small amount of capital and number of shares will on a good discovery in the new ground cause a great rise in price, and which is almost certain.

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HOSPITAL PRACTICE, &c., &c.

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Price-List will be sent on application to THE SECRETARY.



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### Notices to Correspondents.

**COLLIERY MANAGERS' CERTIFICATES OF COMPETENCY.**—"J. L." (Ashton Gate).—Four series of the papers set at examinations for Certificates of Competency were published in the Supplement to the Journal of Aug. 21. "J. L." will, of course, understand that fresh papers are set at each examination, and that the contents of these cannot be known to the candidate until the examination commences. The subsequent publication of the papers is intended merely to let candidates know the nature of the examination. A candidate can be examined in any district, and not alone in that in which he works.

**LEAD AND BLENDRE ORES.**—"J. F. K." (Great Tower street).—All necessary information as to the mines in Cornwall which produce lead and blendre ores, and lead and blendre ores combined, will be obtained from the official Mineral Statistics prepared by Mr. Robert Hunt, F.R.S., the Keeper of Mining Records at the Royal School of Mines. It is published annually by Messrs. Longman at 2s. 6d., and a new edition is nearly due.

**BLENDRE AND LEAD ORES.**—"C. H. H." (Amiweb).—The letter has been forwarded as you desired.

**JOINT STOCK COMPANIES LAW.**—"W. W." (Boston Spa).—No alteration has been made in Table A, but it is seldom adopted in its entirety (the Act permitting digression), and in many cases quite distinct Articles are adopted.

**SHARE DEALING.**—We never interfere in the sale or purchase of shares; neither do we recommend any particular mine for investment or speculation, or broker through whom business should be transacted. The addresses of most of the latter appear in our advertising columns.

**Erratum.**—In the article, in last week's Journal, on the Best Form of Pumping-Engine, the fourth line of the third column of the page, "short" stroke should be "shut" stroke.

**Received.**—"T. W. C."—"M. R."—"J. R."—"J. H." (Geelong).—"Mineralogist." We will publish the particulars, perhaps next week—"G. M."—"Stannum."—"H. N."—"Shareholder" (Wheat Grenville).—"J. F. M." (Virginia).—"J. P." (Paris).—"R. L."—"J. W." (Hayle). Next week—"Scrutator."

## THE MINING JOURNAL,

Railway and Commercial Gazette.

LONDON, NOVEMBER 6, 1875.

### COLLIERY ACCIDENTS IN OCTOBER, AND THEIR LESSONS.

The mining districts have lately been suffering from a plethora of underground explosions, miscellaneous accidents, and fires. These all are due to a variety of causes, which are full of suggestions to the practical and scientific mind. The lessons they should teach may, perhaps, be brought home most effectively by a recapitulation of certain of the circumstances with which the accidents were surrounded, and this we now propose to do. By a gas explosion at the South Liberty Colliery, near Bristol, belonging to Ashton Vale Coal Company (Limited), four miners were killed and five others were injured. This district having always been regarded as free from gas naked lights were almost universally in vogue; and though at this particular colliery there had been slight emissions of gas, yet the ventilation was thought sufficient to preclude all danger. A few hours before the explosion the pit had been examined, and its condition reported perfectly safe. The gas is supposed to have escaped from a new roadway that was being made in the Toad vein, whose strata, as our readers know, are singularly irregular. The Coroner's jury found that the seat of the explosion was inadequately ventilated, but recorded a verdict of "Accidental Death." An accumulation of gas in No. 10 Old Park Pit of the Cannock Chase Colliery Company was fired, and two men were killed by the explosion, which was supposed to have occurred through a "blower" in the roof. As the roadway has been clear of all gases, and two miners had passed along it with naked lights a short time before the explosion, its cause was a mystery to the district Government Inspector, but no one was declared to be to blame. Sinking operations had been pushed as far as 42 fathoms at the Sunderland Bridge Colliery, near Durham, belonging to Mr. H. T. SALVIN, and a drift was being opened to draw away some water when a large accumulation of gas escaped, and instantly exploded, killing a sinker and dangerously injuring two others. The fatal explosion of gas in the Branch Colliery of the Volster Coal Company, Coleford, need not be particularised, for the facts must be fresh in the minds of our readers. Besides this list of explosions there have, unhappily, been numerous others, more or less significant in their character as they have been destructive in their issues.

Turning our attention to miscellaneous colliery accidents, we are immediately struck with the great number, that have resulted fatally to only one worker, and that he but too frequently had contributed to his own death. On this general subject, however, we say no more in this place. Perhaps the most singular fatality in the accidents now under classification was that at the No. 2 pit of the Allanton Colliery, belonging to the Morningside Coal Company, and situated about three miles from Wishaw. A pit was there being sunk to the Drumgray seam; the shaft had reached a depth of 240 ft., and the bottom was continuously several feet under water. Three men had been lowered 10 fms. from the surface by a horizontal engine, when it got out of gear, and the kettle, with the men, fell a distance of 180 ft. Two men were recovered alive, but the other was killed. From amongst the many other accidents we need only instance one as a general specimen, and in which blame was substantiated against the miner who was killed and two others. A manager of a stall at the Wollaton pits, near Nottingham, lighted a shot, but it missed fire, and went off as he was drilling it out. He had been repeatedly told not to re-drill the old hole, but was not informed by the underdriever that the shot had missed fire. Here was an unmistakable violation of the colliery rules; the Government Inspector stated this, and the jury endorsed the statement in their verdict, and also recommended the punishment of the two living miners who had been negligent. Dealing next with the fires in mines, we give first position to the Andes Mine. Its ignition was announced by its evolving a column of flame 150 ft. high; it is now filled with gas, and will not, it is believed, be got into working condition for two months. This calamity throws no fewer than 5000 workpeople out of employment. The fire at the Blue Bell pits, near Old Hill, the property of Messrs. HINGLEY and Sons, broke out after the pits had been standing two days while the men had been attending local wakes; eight valuable horses were suffocated, and the shafts had to be covered in. Coal and refuse were deposited near a furnace drift in one of the pits of the Brynmally Colliery, Wrexham, and they became ignited. Attempts to extinguish the flames caused the severe scalding of three men, and the portion of the work where the fire occurred had to be made air-tight. Illustrative of a somewhat unusual cause of fire, we may cite that at a pit owned by the Stafford Iron and Coal Company, Fenton. It was due to the firing of a shot in a lately opened brassy-mine seam. To extinguish the fire the pit had to be deluged with water, which cannot be pumped out before some considerable time has elapsed.

We need not instance further disasters at coal mines to convince sensible colliery proprietors and mining engineers that much remains to be done before colliery fatalities have been minimised. It may be conceded that a large percentage of the deaths are attributable to recklessness on the part of the workers, and that suddenly developed atmospheric changes are liable to nearly altogether upset otherwise well-balanced calculations. But it would be well that our underground managers should recognise their prevalence to a much

larger extent than they usually do, and a rigid enforcement of the penalty imposed for every criminal dereliction of duty would go far towards reforming the carelessness of the miner. Against this strict observance of the law of responsibility the workman ought not to successfully appeal either to his union or to the general public. The more general diffusion of scientific knowledge amongst our mining engineers, supplemented in the matter of atmospheric changes as it now is by valuable storm warnings, should come to our aid in respect of what may be effected by employees of a higher grade. That their forecasts are valuable we venture to say the majority of our readers will willingly admit. As to the future, let the recent warnings be heeded, for the peculiar atmosphere of November always increases the dangers and difficulties evermore attending colliery ventilation. No colliery manager ever knowingly puts his men into unnecessary danger, and no sensible man ever objects to be reminded of the more than possibility of disasters ahead, against which a little timely forecasting and extra watchfulness may guard him. The month of October has been rife with individual instances of the need there still is of strict discipline, together with thoughtful apprehension of danger near. If the aggregate of deaths and losses had been accumulated in one accident a much louder warning would probably have been thereby sounded; but let us hope that the prominence which the *Mining Journal* has here given to these single accidents will contribute to put our engineers on their guard, and that the result will be a large decrease throughout this month upon the accidents which have happened in the last.

### COAL-CUTTING MACHINERY.

The history of coal-cutting machinery shows that but scant encouragement has been given to those inventors who have not only given their time but have spent large sums of money in attempting to bring it to something approaching perfection. For various reasons colliery owners have shown no desire to make any changes with respect to the mode of raising coal in their pits, not wishing in some instances to come into collision with their men, who as might be expected have not looked favourably on the "iron-man." Amongst those who have laboured long and indefatigably in endeavouring to produce a machine that would rapidly and economically cut an ordinary seam of coal is Mr. FIRTH, of Leeds. Associated in the first instance with the late Mr. DONISTHORPE and Mr. RIDLEY, the three gentlemen so far back as 1861 obtained letters patent for improvements in machinery and apparatus for working coal and other mines. The machine, from time to time, has altered and greatly improved after the patents became the sole property of Mr. FIRTH, but without being of any great value to him until quite recently. But just as he was looking forward to getting back some of the large amount of money he had expended the patent lapsed, having been granted for fourteen years. Mr. FIRTH at once took the necessary steps for obtaining a prolongation of it, and the matter came on for hearing on Wednesday, before the Judicial Committee of the Privy Council. The evidence given by Mr. FIRTH fully bears out our remarks as to the little encouragement given to inventors by those it is proposed to benefit, for he states that the amount of royalties he has received up to the present time is only 5000l. On the other side we find that since the patent was granted an expenditure has been incurred of between 19,000l. and 20,000l., whilst the sales only amounted to about 2000l. Having seen the machine at work, and although, as was said at the hearing, it had been more an experimental one than otherwise, we certainly consider it a most valuable invention, for it does all that can be required of a coal-cutter. And put side by side with hand-labour, not only gets the coal far more rapidly, but in a more marketable state and at a much less cost. It is true that colliery owners have not availed themselves of the machines to any extent, but there is now every reason to believe that a demand for them will arise, especially in the case of new collieries, which can be so laid out, in the first instance, as to make them really valuable. That we are not going outside the bounds of probability we may state that within the last three years upwards of 150 new collieries have been commenced in Yorkshire alone, some of them estimated to produce daily from 1000 to 1500 tons of coal, and at some of the largest of them we have been informed by the owners that it is intended to introduce the best machinery for cutting and bringing down the coal. We trust, therefore, that there is a long and prosperous season before the makers of such machinery, and that they will be able to recoup themselves for the heavy outlays they have been compelled to make in perfecting their inventions. We have also to congratulate Mr. FIRTH on the fact that his patent has been prolonged for seven years, and hope that long before that period has expired he will have reaped the reward to which his indomitable perseverance entitles him.

### THE GREAT STOPPAGE IN THE NORTH.

We rather wonder what the hon. member for Stafford—of whom we somehow seem to hear more now-a-days than of that kindred spirit Mr. HALLIDAY—will have to say upon the ominous suspension of all working operations by BOLCKOW, VAUGHAN, and Co. (Limited). We have arrived at such a stupendous pitch of grandeur, and civilisation, and "progress" in the iron trade that iron making cannot be carried on, somehow, at a profit; and hence ironmasters are fain to close their works. The experience of Messrs. BOLCKOW, VAUGHAN, and Co. is the experience of the Nant-y-Glo and Blairston Ironworks Co., the experience of the South Cleveland Ironworks Co., the experience of the Ebbw Vale Steel, Coal, and Iron Co., the experience of the Rhymney Iron Co., the experience of ever so many other "limiteds,"—which have found to their cost that although they may be "limited," the demands of the working man are practically unlimited. Mr. MACDONALD has recently been on the stump in South Wales, and he has claimed all sorts of advantages for trades unionism. Trades Unions, he contends, have raised wages, improved the appliances existing for the ventilation and general protection of mines and workshops, and in every way ameliorated the condition of the iron worker and the miner. Now, we rejoice with Mr. MACDONALD that Parliament has taken in hand,—and apparently with a certain measure of success—the important question of the regulation of mines and workshops, in the interest of the working man, and the still more important question of the improvement of the dwellings of the artisan class. Neither can we blame the working population for making an occasional stand in order to maintain wages at a reasonable level; but what we do protest against with all our force is the chronic discontent which Trades Unions and the delegate system foster. The delegates never leave the working man alone. They are always hunting up grievances for him; otherwise, of course, their craft would be in danger. Again, we object to the trades unionism of the period because it is rampant, uncontrollable, unreasoning, and unreasonable. The trades unionism of 1875 troubles itself very little about such commonplace matters as balance-sheets. If an employer can contrive to extract a little profit out of a year's work, so much the better; but if he cannot succeed in doing so—well, that is altogether his affair, and not the delegates' business. The motto of trades unionism is essentially "Let us eat and drink, for to-morrow we die." The trades unionist thinks only of the present, and heeds not the future. He does not stop to enquire whether he is killing the goose which lays the golden eggs; his business is to extract more and more wages—or, rather, higher and higher wages—from the unfortunate capitalist; and so long as this object is attained, the trades unionist does not concern himself very much about anything else. Another objection to trades unionism is that it arrogates to itself the functions of advocate, judge, and jury, all at once. Upon imperfect or incomplete information as to what is passing upon foreign markets, the trades unionism of the day dictates to employers the rate of wages which shall be paid and the number of hours' work which shall be given in exchange for the money paid. The result of the trades unionism of the last few trying years is that the capitalist who has embarked his resources in the manufacture of iron in Great Britain now finds himself unable to obtain even common interest for his money.

In view of intolerable obstacles and difficulties, BOLCKOW,

VAUGHAN, and Co. (Limited) have resolved to cut the Gordian knot in which they have become entangled, and to altogether close their works. The first sufferers by this decision will be the trades unionists themselves. It is very unfortunate, but it cannot be helped. The position of the iron trade has become so trying that radical remedies will alone suffice. When the trade horizon has become a little clearer, and when the British ironworker is content to give his labour for a remuneration which will yield his employer a little interest upon his capital, then perhaps the cheerful hum of labour may again be heard in the workshops of BOLCKOW, VAUGHAN, and Co.

**GOLD MINING IN VICTORIA, AUSTRALIA.**—We have been favoured by the Secretary for Mines (Mr. R. Brough Smythe) with the gold mining statistics for the quarter ending June 30, which show that 41,879 miners were employed. Of these 16,336 Europeans and 11,270 Chinese were engaged in alluvial mining, and 14,120 Europeans and 153 Chinese in quartz mining. From information obtained from gold buyers and others by the mining surveyors and mining registrars, the total quantities of gold got from alluvium was 105,509½ ozs., and from quartz reefs 152,132 ozs. The 224,193 tons of quartz crushed yielded 132,567 ozs. of gold, or at the rate of nearly 12 dwts. per ton; 10,704 tons yielding 2 dwts. 6 grs. per ton, or 1222½ ozs. in all; and 1680½ tons of pyrites and blanketing yielded 3921½ ozs. of gold, or at the rate of 2 ozs. 6 dwts. 16 grs. to the ton. The appendix contains the continuation, with a beautifully executed lithogram, of Baron Von Mueller's description of new vegetable fossils of Victoria. The present part embraces descriptions of xylacaryon and xylacaryon lockii. He remarks that by the aid of this new disintegration of fossil fruits the remarkable fact seems established that the range of variability with reference to the size of these fruits, but not with regard to their structure, was much greater than is observed in cognate now living plants.

**FRISOETH'S MAP OF UTAH.**—The new and revised edition for 1875 of Mr. B. A. M. FRISOETH's pocket map of Utah has just been issued, and Messrs. Trübner and Co., of Ludgate-hill, have arranged to supply it in this country at 1s. per copy. The map is a great improvement upon that of 1871, and represents all the Government Surveys to date, also the location of 78 mining districts in Utah duly organised. During the present season there has been great activity in developing mines in nearly all of the prominent districts with the most encouraging results; there will in consequence be an increase in the yield of bullion as compared with last year of from \$4,000,000 to \$5,000,000, and if working capital were not so scarce as it is at present greater results could be attained. The map, like the former edition, is admirably printed, and vividly coloured, so that the location of any particular property in which the reader may be interested can be readily found. Mr. Frisoeth has shown, very distinctly, the railroads completed, railroads proposed, roads made, county seats, cities, towns, and settlements, Indian reserves, county and mining district boundaries, proposed surveys, and, indeed, all other matters likely to be of interest to the practical miner and those whose capital is engaged in the working of the mines.

**MINING IN CHILL.**—The Cerro de Pasco silver mines, which formerly produced enormously, and which rank among the richest in the world, have of late years produced very poorly in consequence of the mines having filled with water to such an extent that they cannot be kept clear enough to allow their richer portions to be worked. Lately the Government has initiated a project for the excavation of a tunnel which would drain the whole of them, and the construction of which has long been talked of, but which has never been carried out, owing to personal jealousies or the want of funds. The tunnel, we believe, is estimated to cost nearly two millions of soles, and would certainly prove a most profitable undertaking. Mining appears to be taking a new start in the country, but nothing can be hoped for on a large scale unless intelligent practical miners from other parts are induced to go there, and foreign capital is found to carry on the works.

**NOVELTY IN MINING.**—An Australian correspondent informs us that the Great Britain Copper Mining Company (Limited) have offered to give a bonus of 5000l. to any party of miners who will raise 5000l. worth of marketable copper ore on the mine, the ore raised to be the property of the raisers. The directors will allow the use of their engine, and are prepared to make arrangements for carrying on the work.

**GOLD.**—An American contemporary gives the following:—Gold is valued at \$146 per cubic inch. At this rate a cubic foot of the precious metal, which contains 1728 cubic inches, will be worth about \$252,288. The entire quantity of gold now known to be in existence is valued at about \$3,000,000,000, so that if it were welded into one mass it could be contained in a cube the side of which would not measure over 23 feet.

**COAL AND IRON IN THE UNITED STATES.**—The production of anthracite coal in Pennsylvania to Oct. 2 this year was 14,619,564 tons, as compared with 14,978,180 tons in the corresponding period of 1874. The decrease of 358,616 tons indicated by these figures will probably, however, be recovered before the year has run its course, as the production is now proceeding on a very large scale. The production of bituminous coal in Pennsylvania to October 2 this year amounted to 2,933,057 tons, or 187,864 tons more than the corresponding production in the corresponding period of 1874. English rails have been quoted at New York at \$47½ to \$50 gold per ton; American rails have made \$48 to \$50 currency per ton at the works. The Central Pacific Railroad Company and the Southern Pacific Railroad Company have determined to use steel rails exclusively in future upon their roads and branches. The sale is noticed of 400 tons of iron rails to the Peachbottom Railway Company at \$48 per ton currency.

**GOLD IN WALES.**—Considerable attention has lately been called to the fact of gold existing in Merioneth, and several very exhaustive letters on the subject have lately appeared in the Journal. The fact that gold existed in the quartz reefs traversing the country in the neighbourhood of Dolgelly has long been known; in fact, some go so far as to say the Romans were aware of its existence, and mined for it. Hitherto the many companies started to work the quartz have failed, in a great measure owing to the want of knowledge of the proper machinery. The district has lately been visited by experienced Australian gold miners; what their opinions of the prospects are may be gathered from the fact that most of the most promising sets have been secured. We believe we are not breaking confidence in saying that some extraordinary results have been obtained by alluvial washings; in one place the produce was 56 ozs. to the ton, and in many it was as high as 9 ozs. That these results were actually obtained we can vouch for, but whether the places selected were exceptionally good or not remains to be seen. We notice the Annual of the "Gentleman's Magazine" contains a tale founded entirely on gold mining in Merioneth; and there is no doubt that public attention will be directed to this part of the country, which may prove the California of England.

**LIGHT LOCOMOTIVES FOR UNDERGROUND HAULAGE.**—The question as to which is the best system of underground haulage is one which has not been, and from the very nature of the case never can be, finally settled, for the system which is best adapted to one case may be entirely unsuited to another. The conditions which obtain in mines are exceedingly various, and each case must be considered in all its bearings before choice can be intelligently made. There is, however, little room to question the advantage of substituting mechanical animal haulage in and about the mines wherever the distance is at all considerable. The progress made in America in the use of locomotives underground has been considerable during the last few years, and the New York "Engineering and Mining Journal" has now prepared an interesting table showing the work actually performed by some light locomotives manufactured by Messrs. Porter, Bell, and Co. of Pittsburgh. It appears that at the collieries of Messrs. Brooks and Son, of New York, where the grade is 320 ft. per mile, with curves of 40 ft. radius, they haul 10-ton train-loads, with a locomotive having cylinders 7 in. diameter and 12 in. stroke. A similar engine at Haydensville, Ohio, hauls 57-ton train loads where the grade is 48 ft. per mile, and half-a-dozen others are working equally well elsewhere. As to the relative cost of hauling by locomotives, by fixed engines, and by endless ropes or chains there is no reliable data, the question not yet having been investigated in a satisfactory manner; and, indeed, the conditions then the relative



It would probably decide in most cases the adoption of this or that system. The locomotive may be employed in the work of from six to 20 miles, according to the conditions under which it works—and in most cases it will be found economical where it can replace four mules. For underground haulage the chief objection to locomotives is the vitiation of the air by the products of combustion of the coal employed. In general the roadways on which the locomotive works require a special ventilation—that is, a separate split, by which the foul air is carried directly into the return air course. In the case of certain kinds of shale roofs the steam and heat from the locomotive are injurious, as they tend to disintegrate it, and they also greatly facilitate the decay of the mine timber. But as the special ventilation required to carry off the products of combustion is generally sufficient to carry off the steam and heat quickly, the injurious effects of these are greatly diminished. The light locomotive is an exceedingly convenient motor, and for tracks partly or altogether outside the mines the chief objection to it disappears; and if these advantages were more fully known and appreciated a very notable economy in the item of haulage would result at some of our mines and furnaces.

## REPORT FROM CORNWALL.

Nov. 4.—The annual meeting of the Royal Cornwall Geological Society, held last Friday, at Penzance, was in attendance at any rate quite a revival of the old times, and there really seems ground to believe that the Institution is entering upon a new period of activity and usefulness. It enjoys the advantage of a most practical president in Mr. Warrington Smyth, F.R.S., and that gentleman made some specially valuable and interesting remarks upon deep mining. For the last three years, he said, a geological experiment on a bold scale had been carried on near Battle, in Sussex, the real object of which was not to dig gypsum—not to open a new supply of salt—not to discover coal in Sussex—but to find out what was below the Wealden, and thus contribute to solve a great practical problem for London and all the South of England. The deep exploration of the earth's crust was of more interest to them whose lot was mainly cast among the more ancient rocks. The silver-lead mines of Pzibram, in Bohemia, had been driven to the amazing perpendicular depth of 1000 metres, or 3280 ft. A vertical shaft, called Simon Lambert, in Gilly, near Charleroi, was 3493 ft. deep, while the depth of Dolcoath Mine was 322 fms. up to the adit. Adding 26 fms. from adit to the surface, the total was 352 fathoms. These depths, that looked like a mere scratch to the cosmologist, whose eye was filled with the measurement of the radius of the globe, looked formidable enough to those who had to count the cost of all the operations connected with the sinking, and his chief reason for bringing the matter before them was to aid in commemorating a great mining fact, and to give confidence to those engaged in deep mining by advertising the continuous and great prosperity of the deepest metalliferous mine in the world. It is very clear that we have not by any means exhausted yet the possibilities of our own deep mining. While Dolcoath looks up so well there is no reason why the lode should not be followed for another 100 fms. yet.

There was a lively discussion on the productive points of mineral lodes initiated by Mr. Williams, of Hayle, who holds the view that large sums of money might be saved by confining operations so far as possible to the productive points of lode junction and intersection, but it was conclusively pointed out that the exclusive adoption of this course would have caused some of the richest deposits to have been missed altogether, and that Mr. Williams was not quite so original in his ideas as he appeared to fancy, though there was certainly some reason why he should think so in the manner in which this branch of scientific mining has been neglected in practice.

The best mining paper was unquestionably that of Dr. Foster, on the remarkable tin deposit at East Wheal Lovell. The tin deposits at East Wheal Lovell occur in the form of pipes and bunches—a pipe being merely a long narrow bunch. The most remarkable pipe is that which has extended from the 40 fm. level to the 110. It consists of a mass of rich tinny rock, in the form of an irregular cylinder, which the author considers an altered granite. The pipes and bunches are all traversed by a narrow vein of quartz. Dr. Le Neve Foster supposes that the original fissures of these veins descended into Nature's laboratory in the bosom of the earth, and brought up stanniferous and other emanations, either in the gaseous or liquid state, which attacked the granite walls, carried away some of the constituents, and deposited tinstone. The rich East Wheal Lovell deposits are thus merely the altered walls of a fissure in the granite. He explains the formation of pipes by supposing that the vapours or solutions were confined in their ascent to chimney-like gaps, which would be left if one side of an irregular fissure were shifted laterally. A tabular statement furnished to the author by Mr. Henry Rogers showed that from October, 1869, to June, 1871, a profit of 27,000£ was made on sales of tin amounting to 38,000£; in other words, the dividends declared amounted to more than 70 per cent. of the value of the tin sold. Well done, East Wheal.

"Because thou art virtuous shall there be no more cakes and ale." "Yes," would seem to be the opinion of the committee of East Pool, judging from their recent circular:—

"The committee of East Pool beg to communicate to the shareholders at large that written representations have been recently made to them from several of the largest and influential holders in the mine, that the abolition of formal dinners at the account meetings would be desirable, and requested the serious consideration of the subject. In consequence, they have reflected closely on the question, and having from due enquiry that great inconvenience and expense are incurred owing to the limited means possessed in the counting-house, and the largely increasing number of adventurers who now attend the meetings, they have, for these and other reasons, come to the conclusion that it will be very desirable in future to substitute for dinners the adoption of a lunch refreshment."

What can mining be coming to when East Pool, in the days of prosperity, drops its dinner? Verily the old days are departing indeed, and we can have no confidence in the stability of anything human. How many differences have been forgotten at mine dinners; how many breaches healed; how many desponding adventurers roused to fresh efforts. And these things are to be no more. There are several matters of mining practice that we could better afford to see a change in.

The following remarks, addressed to a contemporary, are very sensible:—

"I saw some articles in your valuable paper some weeks since about the boring-machines, and the prizes by Mr. Bassett for the best machine. I have also noticed the prizes offered to the best pair of miners for the greatest amount of work they could accomplish in a given time. All this is very good, but I think, with many others, that there is still something needed in order that success may attend the efforts thus far put forth, and that is that the machine should be put in charge of the engineer at the mine, and he should select men whom he thinks fit to take charge of the machine underground, and not the miner. Let the miner, I say, do his own work, and have nothing to do with the machine for the present. But the time will come when there will be found among the miners those who will be competent to take charge of the machine; but this is not the case at present, for, unfortunately, there is great prejudice in many of the mines against the machine, and we all know that prejudice hath neither eyes nor ears."

## TRADE OF THE TYNE AND WEAR.

Nov. 3.—Continued dulness prevails here both in the coal, iron, and most other trades. There is a good demand at present for house and gas coal, but all other coals and coke are very dull, and the prices realised also very low. Now that the export season is closed the demand for steam coal is very limited, and the steam coal works in Northumberland are working from three to four days per week. Formal notice has been given by the Northumberland mineowners to the officials of the Miners' Union that they will ask for a reduction of 20 per cent. in the rates of coal hewers, and a reduction of 12½ per cent. in the wages of all other men employed in and about their collieries. This reduction to take place on Nov. 18. A special meeting of the Durham Coalowners' Association will take place on Friday, when the question of a reduction in Durham will be discussed, and there is little doubt that a large one will be demanded. As a rule the Durham coal mines are not paying their way at present, and many of the worst pits have been laid off, and this course will be adopted at others shortly.

Arrangements have been made to inaugurate the Jude and Hepburn memorials on Saturday. The proceedings will be of a very interesting character, and will include addresses from several contemporaries and personal friends of those two justly celebrated men, whose memory it has been determined to perpetuate. A public meeting is to be held in the morning at Heworth, after which the stone raised to the memory of Thos. Hepburn, in Heworth churchyard, will be uncovered, and after this ceremony a large portion of the company will proceed to Elswick Cemetery, when Martin Jude's monument will be formally unveiled. Mr. Thos. Burt, M.P., and most of the officials of the unions of the two counties have promised to take part in the proceedings, whilst the men of several Tynesides

collieries have volunteered to march in procession with bands and banners.

There is no improvement in the Pig-Iron Trade, although the general rates for raw iron have not been altered during the past week, and the manufactured iron trade is extremely bad; although the rates have been reduced to the lowest possible point it is found to be impossible to keep the mills going unless for stock. The news which arrived in Newcastle on Saturday, to the effect that the extensive rolling-mills of Bolekow and Vaughan, at Middlesbrough, are to be stopped, caused great consternation, especially as it is feared that other large works in the district will follow the example.

There was a good attendance at Middlesbrough market on Tuesday; and, notwithstanding the present and prospective depression, a fair enquiry for pig-metal, chiefly to complete shipments. There was a better feeling than might have been expected after the statement that Bolekow, Vaughan, and Co. were about to close their works. It seems that, for the present at all events, the best furnaces will not be stopped, though there is no doubt that these will largely have to follow if the finished ironworks remain inactive, and along with them pitmen and ironstone miners. Some of this class of workmen have been expecting their notices. Pits are closing in some parts of the county of Durham; and the coalowners, like those in Northumberland, who has just given notice of a reduction of 20 per cent., will shortly demand a reduction of wages. With regard to the condition of the Iron Market, it is necessarily very unsettled. Pig-iron is lower in price, though quotations are very irregular. No. 3 is on offer by merchants and "bears" at 48s. to 48s. 6d., but makers are asking 49s. to 49s. 6d. for the remainder of the year. Forge-iron is 47s. 6d. to 48s. at makers' works, but small lots are sold for less money by middlemen. The Cleveland Iron Stove Company, formed some time since, is likely to get into active work shortly, as they have bought 10 acres of land for their purposes. Finished iron keeps low. Rails are 6½, 12s. 6d. to 6½, 15s.; ship-plate, 7½, 10s.; puddled bars, 4½, 15s. 6d.; common bars, 7½, to 7½, 5s. Coal and coke are in slack demand. Prices run very low.

NORTH OF ENGLAND INSTITUTE OF MINING AND MECHANICAL ENGINEERS.—A general meeting of members will be held on Saturday. Much interest attaches to the business to be brought before the meeting. A number of new members stand for election. A paper will be read by Prof. A. Freiri Maricao, M.A., entitled "Some further notes on recent examinations of Coal Gases." The following papers by Mr. G. A. Lebour, F.G.S., will be discussed, "On the Little Limestone and its accompanying Coal in South Northumberland," and "On the Great and Four-fathom Limestones and their Associated beds in South Northumberland."

WALKER'S PATENT DETACHING HOOK.—The prevention of overwinding at collieries has now become so much a matter of certainty by means of Walker's detaching hook, that coroners' juries will no longer be justified in describing as "accidental" deaths caused by that preventable occasion of the destruction of miners' lives. Mr. James Wroe, managing partner in the firm of Rhodes, Wright, and Wroe, Park Farm Colliery, Liversedge, Heckmondwike, purchased a pair of Walker's patent detaching hooks in the spring of the present year. He writes on Friday last:—"One of our enginemen forgot to shut off the steam at our winding-engine to-day at noon. The result was the overwinding of the cage with three persons. I am exceedingly glad to inform you that the detaching hook acted admirably, and to perfection, not only saving the lives of the three men, but also effecting a great saving in machinery as well. I cannot express to you how thankful I am at the result." And yet at this very time the Birmingham papers are reporting the occurrence of a later accident to that here prevented. "A number of miners were ascending the shaft in a cage," says one of these reports, "when, from some cause at present unexplained, the cage was drawn over the top wheel, and four men were killed! The cause at present unexplained, is the absence in innumerable cases of a suitable apparatus; and, with Walker's invention before us, we cannot but think owners and managers undertake a serious responsibility to neglect its use."

For some time past a drilling apparatus has been in operation in one of the principal ironstone mines in Cleveland which promises to effect quite a revolution in this most laborious and expensive process. Results obtained over a period of nine or ten months show that the cost of "getting" the ironstone by mechanical means is less than one-half that of getting it by hand; and the gentlemen at whose mines the machine has been introduced are so satisfied with its superior efficiency and economy that they have now made arrangements for laying down a plant of 20 additional machines, to be worked by compressed air. It is a pity that the miners have offered some obstruction to the introduction of the machine. For this reason I am not permitted in the meantime to give more definite information concerning it; but, from all that I have seen and heard, I am in a position to assure my readers that unless the miners as a body compel its abandonment—and this I would fain hope they would never venture to propose, seeing that its application is so unmistakably calculated to aid them in the most arduous part of their toil—the new drilling machine will ere long inaugurate quite a new era in the cost and other conditions of ironstone mining in Cleveland.—"Elfin," in the Newcastle Daily Chronicle.

## REPORT FROM LANCASHIRE AND CHESHIRE.

Nov. 4.—The reductions which in my last report were anticipated with regard to prices of coal have come into effect with the beginning of the month, and seem likely to be maintained. The advance in West Lancashire has been at the rate of about 1s. per ton, though in some cases, and especially with regard to the superior qualities of house coal, the rise has been as much as 1s. 6d. and even 2s. per ton. The last rate has to a great extent been adopted by the smaller firms, and it is not unlikely that they may have to come down in price, and accept the same advance as has been adopted by the larger firms. Shipping continues very dull, and will not now improve until the spring trade sets in. Prices may be quoted as under (at the pit mouth): Best Arley, 14s. to 15s.; Pemberton, 4½, 11s. to 12s.; ordinary house coal, 9s. to 10s.; slack, 6s. to 7s. Slack is exceedingly abundant, and the supply of coke is considerably above the demand.

The members of the South Lancashire and Cheshire Coal Association held their annual meeting at the Clarence Hotel, on Monday. There was a fair attendance. The retiring President, Mr. J. Booth, submitted a report, in which he reviewed the proceedings of the Association during the year, and detailed the operations of the committee appointed to deal with the question of the unsatisfactory state of the coal traffic, concerning which there were, as will be remembered, many serious complaints, especially at the time when the trade was exceedingly busy. Mr. W. Pilkington, of the St. Helens Collieries, was elected President for the ensuing year. At the close of the business proceedings the members dined together. Colliery villages, pure and simple, are not common in Lancashire, and in many parts of the mining district the house accommodation for the workmen is of the most barren description. At Howe Bridge, Atherton, Messrs. Fletcher, Burrows, and Co., colliery proprietors, have recently created a small town. Over 200 cottages, for the use of colliers and other in the employ of the firm, have been erected, and this week a handsome village club-house has been opened. The total cost exceeds 2000£, and the institution is to be enrolled under the Friendly Societies Act. Beer, wines, and spirits are supplied. In another part of the township the firm have established a reading-room, and a new church is in course of erection by the Fletcher family.

The Iron Trade remains unaltered, and is in a very low condition. Ordinary bars, delivered in this district, are nominally quoted 7½, 17s. 6d. per ton, but there is much underselling.

Two deaths have occurred at one of the collieries of the Garswood Coal and Iron Company, through a miner having neglected to attend to the most ordinary precautions as to propping. The deceased, who was named Walsh, had been told to put up some props, but he delayed, and a fall of roof took place, killing instantly his grandson, who worked with him, and so injuring him that he died on Saturday last.

## REPORT FROM DERBYSHIRE AND YORKSHIRE.

Nov. 4.—The business doing at the ironworks in Derbyshire has undergone no change of late, the works being kept well going in all directions. More activity has taken place with respect to house coal, and prices have improved. The miners have been working very well, a fact which contrasts favourably with many other districts, in some of which the men have received notices of a reduction of wages. Trade with London keeps up very well, and merchants are now getting from consumers 3s. per ton more than they did during the summer months. Steam coal continues in reasonable request, and a rather moderate demand prevails for engine fuel. Some progress has lately been made towards erecting a Memorial Hall to George Stephenson, at Chesterfield, where his remains now rest. An eligible site has been secured, but the subscriptions—which are under 5000£—are not what might have been expected. It is, however, hoped that a large additional sum will yet be received by those who have benefited by the works of the celebrated engineer. The proposed hall will have rooms for the Derbyshire Association of Mining and Mechanical Engineers, as well as for other local bodies.

Some little improvement has taken place in some of the Sheffield branches of trade, and which will, doubtless, continue to the close of the year. The mills engaged in heavy plates have been running as usual, and rather more is being done in light plates and rails. Bessemer is in better request, and at the branch works of Messrs. Cammell and Co., at Penistone, upwards of 1000 tons per week are being

made. Best qualities of table cutlery have become more active, and the foundries are busy. A considerable number of millmen are out, those at Parkgate not having resumed work. In the Barnsley district a good business is being done in manufactured iron, and engines and machinery for colliery purposes. The house Coal Trade is good, and an increased tonnage has been sent over the Great Northern to the metropolis of late, and colliery owners have been able to obtain a small advance in price. Steam qualities are declining, as the announcement that the Baltic ports are closed may be expected any day. Home requirements have undergone no alteration. The question as to the deficiency in the accounts of the Miners' Association, amounting to 4550£, is making some noise in the district, and on Tuesday evening there was a meeting at Mexborough on the subject, when a large number of men attended, but refused to hear any accusation as to the defalcations brought against the officials. The association of late has lost a considerable number of members, and the council appear to think that it is best to say no more about the matter, and to keep a better look-out for the future. The coal producing power of South Yorkshire is rapidly increasing, and in the course of another year in the Barnsley district alone the additional out-put promises to be at the rate of nearly 2,000,000 tons a year more than it is at the present time. One great advantage the new collieries will have is that they can be so laid out that the coal can be raised by machinery, and at one large place the necessary steps for so doing have already been taken by the owners.

AN UNFORTUNATE COMPANY.—Limited companies in the Sheffield district have fallen on evil times. The report of Messrs. G. and J. Brown and Co. (Limited), of Rotherham, shows that the company is in a deplorable condition. The company started three years ago with a capital of 125,000£, for the manufacture of iron and railway material. The vendors guaranteed a dividend of 10 per cent., but the concern has never paid, having lost 26,000£ of its capital, and even under new management has sustained losses to the extent of 4000£ this year, as well as 12,000£ loss on a colliery which had been taken by the company. The directors, in issuing their report, have omitted the name of the Chairman (Mr. G. Brown) one of the vendors, who in a circular asks that judgment should be suspended until the annual meeting, when it is believed some startling disclosures will be made.

## REPORT FROM THE FOREST OF DEAN.

Nov. 4.—The Coal Trade has slightly improved during the last few days, but the improvement has reference more especially to the eastern side of the Forest, and to work and output of material rather than change of price. Prices having continued almost in statu quo for a considerable period. The Flour Mill Colliery, which became flooded in consequence of the late heavy rains, is understood to be getting again in working condition, the pumps having done effective service in drawing off the surfeit or choke of water. A good find of coal is reported at the Brick Pit, belonging to the Forest of Dean Coal Mining Company, Moseley Green; the Brogilly seam having been cut, is said to average over 4 ft. in thickness. This "find" of coal has not unnaturally raised the spirit of the adventurers, the directors considering that the prospects of the shareholders are decidedly encouraging. The Parkend Coal Company, for some special reason, is reported as having discharged some of its men, but which we conceive will only be temporary—until some necessary adjustment has been effected. Messrs. Morrison and Beauclerk, the enterprising purchasers of the Sewdley Furnaces and mining property connected therewith, have just registered themselves as a limited liability company, with a capital of 150,000£, in 10% shares, but of course upon its formation merged as members of the firm. The principal subscribers are said to be—Robert McEwen, Manchester; T. Kirkwood, Bideford; J. H. W. Biggs, Liverpool; R. H. W. Biggs, Liverpool; H. F. A. C. Beauclerk, Newnham; and, of course, the vendors, who take a large number of fully paid-up shares and 1500£ in cash, payable within three months, bearing interest at the rate of 5 per cent. The mining property included in the purchase comprises Noxon Park, King's Moor, Scilly Point, and Ingles Level Mines in Dean Forest, and it is understood that the company will aim at acquiring other mineral property in addition to the above, which undoubtedly may be obtained at reasonable cost without going beyond the Forest boundary.

We are pleased to note that the portion of line of the Severn and Wye Company, from Parkend to Coleford, is expected to be inspected by Col. Rich about the 15th inst., and if reported satisfactory, as is anticipated, it will be opened for passenger traffic not later than Dec. 1, which will be hailed as especially important to the town of Coleford, and to all others who may have occasion to visit that town, whether Foresters or outsiders. In reference to the difficulties which are reported as having cropped up in connection with the contractors for completing the Whimsey and Mitchell-dean Road branch, we regret to add that the "hitch" has ended by a composition with their creditors of only a few shillings in the pound, so that the "fidgetty" creditors, who were thought too fast at the time, were right after all. And although it may be too early to speak with much confidence, report says that the compounding contractors will, notwithstanding, go on with the line until the work is finished.

The Wingstone estate, between Newnham and Blakeney, consisting of a family residence and 35 acres (odd) of grounds and ornamental plantations, has been sold by auction, being purchased by Mr. Maule (of the firm of Wintle and Maule, solicitors, Newnham) for Mr. J. Badeley, the price being 5000£. The sanitary works for Cinderford, as far as sewage is concerned, seems rather nearer inauguration than was expected by many, a meeting having decided last week to borrow 3900£ for the purpose of Government.

## REPORT FROM NORTH AND SOUTH STAFFORDSHIRE.

Nov. 4.—The South Staffordshire Iron Trade has shown increased strength in the course of prices this week, the rates for medium and common classes of finished iron being fully 5s. to 10s. per ton higher. Common iron is on the basis of 8½ to 8½, 5s. per ton for bars, and medium iron of the best known makes has advanced proportionately. Messrs. Dawes and Sons, of Bromford, whose iron is largely consumed in the district, have raised their quotations 5s. per ton all round. Branded iron is on the basis of 10½ for bars, the rate fixed by the leading firms at the Midsummer Quarterly Meeting. The increase in the rate for medium and common iron is, of course, due to the advance in the price of coal, which we announced last week, and which took effect from Nov. 1. The demand for finished iron is, with the exception of sheets, not of much importance. The pig-iron trade is quiet, but steady, and the smallness of stocks in the district, together with the increase cost of production, combine to render prices firmer. Common cinder pigs may be quoted 3½ to 3½, 5s. per ton, and best native all-mine pig 4½, 15s. per ton, the rates for intermediate qualities being in the usual proportion.

Considerable diversity of opinion prevails among the coalowners of South Staffordshire as to the prudence of the action taken last week with regard to prices. The Thick coal owners of Dudley and the house coal owners of Cannock Chase, who find a ready market outside the district, are contented enough with the decision, but coalmasters who work the thinner measures, and who are more dependent upon the local iron trade for their demand, regard the step as unwise, and likely to check business. Disapproval is also expressed in many quarters at the concession made to the colliers in wages without an extra hour being given up to increase the length of the working day. It is, however, too soon yet to pronounce an opinion as to the probable effect upon the trade of the course upon which the coalmasters have decided.

The following were included in to-day's quotations on the Birmingham Stock Exchange:—Sandwell Park Colliery, 35; Cannock and Huntington Colliery, 4 prem.; Chillington Iron, 5½; John Bagnall and Sons, 6; Ivy House Colliery, 1 dis.; Spon Lane Colliery, par; Patent Shaft and Axle, 5 prem.; Willenhall Gas (5½ paid), 10 buyers; East Cannock Colliery, 75 buyers; Hamstead Colliery, 4 prem.; buyers; Mid-Cannock Colliery (19½ paid), 7 prem.; Patent Nut and Bolt, 4½ prem.; Horseley Ironworks, 3 prem.; and Gloucester Wagon, 10½. The general tone of the market is steady.

The North Staffordshire Iron Trade is, on the whole, quieter than last reported, and the prospects of the winter are not by any means encouraging. Several of the works are partly idle now that the pressure of the shipping season is removed, the requirements of the



home market being totally inadequate to the producing power. The leading firms are still quoting 8s. 10s. to 8s. 15s. for bars, but for commoner makes of finished iron quotations are very irregular. The markets for pig-iron and ironstone are just now particularly quiet. The Coal Trade of the district is inactive, but the tendency of prices is firm, in sympathy with the movement in the southern part of the county.

**SALE OF THE BLAKELEY HALL AND BROMFORD COLLIERIES.**—These collieries, situated at Oldbury, were sold by auction yesterday, at the Midland Hotel, Birmingham, by Mr. Bateman. The property is partly freehold and partly leasehold. The freehold portion consists of Bromford Colliery, near the Bromford Ironworks, comprising twenty acres of land, with the mines, shafts, and plant; and the leasehold consists of the measures of coal and ironstone lying under the Blakeley Hall estate, the Birmingham Canal, and half the adjoining roads. The leasehold portion contains 82½ acres, and the right was given to the purchasers of using a portion of the surface in the centre of the estate for mining purposes. The sale was effected subject to the payment to the owner of the Blakeley Hall estate of £1,350, by quarterly instalments, extending over a period of 12½ years. It was stated that the coal under the latter estate had been proved to the extent of 1200 yards by gate roads, and the coal, which was of excellent quality, was in its entirety. The bidding commenced with an offer of 8000l., which was raised to 10,000l., in the subsequent bid, then increased to 15,000l., by successive bids of 1000l., and after several other offers, varying from 500l. to 1000l., the property was finally knocked down for 17,200l., to Alderman Carter, M.P., for Leeds, Mr. Symonds, Mr. Riddell, Mr. W. R. Hedges, and Mr. Shepherd (Leeds), who are understood to have been acting in the interests of the preference shareholders of the company.—*Birmingham Daily Post.*

#### NORTH STAFFORDSHIRE MINING INSTITUTE.

The monthly meeting of the members was held on Monday, at Stoke-on-Trent.—Mr. C. J. Homer presiding. The following, having been previously nominated, were elected members:—Mr. Harold Bonser, land and mineral surveyor, Newcastle-under-Lyme; Mr. William H. Hales, iron and brass founder, Cobridge; Mr. Frederick W. Llewellyn, manager Shelton Bar-Iron Works; Mr. George Menzies, agent to the Duke of Sutherland's mining estates, Trentham; Mr. William Griffiths, colliery manager, Berry Hill; Mr. James Hodaon, wire-rope manufacturer, Huyton, near Liverpool; Mr. M. J. Landau, engineer, London; Mr. William Hopkins, mechanical engineer, Newcastle.

Mr. Chambers, of Cawthorne, near Barnsley, exhibited a model of a patent equilibrium valve, for application to engines used in winding coal and ironstone from mines. The improvement is in excluding from the back or top of the valve in vertical or horizontal engines, as the case might be, by which means the smallest amount of friction is secured, the valve being moved with as perfect ease when the engine is worked at high-pressure as when it works at low-pressure, or no pressure at all. It can also be nicely adjusted according to the circumstances of each particular case. After Mr. Chambers gave some verbal explanations as to the working of the new valve, Mr. Foden said he thought a coil-spring was preferable to the flat one. Mr. Warner and other members expressed their approval of the valve of Messrs. Chambers and Jones. Mr. Chambers promised to supply a paper on the subject.

The SECRETARY (Mr. J. R. Haines) read a paper which had been prepared by Mr. A. C. Bagot, in respect of a new patent indicator for use in mines. He urged that what was wanted was a form of barometer which should tell them on the bank what was the state of the atmospheric pressure in the mines, warning them automatically, if possible, of the fact, and continue to do so until they restored due atmospheric pressure to its proper point—namely, 15 lbs. per square inch. This special regulation he claimed to be met by his patent safety indicator. He described by the aid of diagrams the instrument he had invented, and said he had proposed to place a pair of the instruments in the return airway of the mine, and set the barometer at a point corresponding to 29 inches at bank, the thermometer at 60° F., and lead the electric wires up the downcast shaft, to bank, setting the barometer for fall and the thermometer for rise. The indicating and alarm apparatus he proposed placing in the engine-room. When, therefore, the atmosphere in the mine exerted a pressure of less than 15 lbs. to the square inch, there would be an indication and a warning, and the ordinary precautions must be taken at once. He contended that while the mercurial barometer was liable to all sorts of disorders, his instrument was not affected in the same way.—A vote of thanks was passed for the paper, and it was understood that the council would consider whether it should be printed and circulated amongst the members. At the close of the meeting some successful experiments were made with a respirator for exploring mines charged with gas.

#### SOUTH STAFFORDSHIRE AND EAST WORCESTERSHIRE MINING ENGINEERS.

The monthly meeting of members was held in the Geological Museum, Dudley, on Monday.—Mr. JOHN HUGHES presiding. There were present, among others, Messrs. W. Spruce, T. Parton, T. Latham (vice-president), W. Hayward, Wm. Fletcher, R. Latham, J. Field, C. J. Cooper, J. Turnley, &c. Mr. Thomas Marsh, mining engineer, Burnt Tree House, Tipton, was unanimously elected. The next business was the question of entertaining the proposal of the South Midland Institute of Mining Engineers.

The PRESIDENT read a protest from Mr. David Peacock, in which that gentleman said he thought the members of the South Midland should pay an entrance fee, believing that that was the opinion of the council. On the other hand, he had received a letter from Mr. Blakemore, in which that gentleman trusted the stronger Institute would give a hearty welcome to the weaker one, and receive them as a scientific institute only anxious to improve its members, and not at all anxious after the few pounds of entrance fee, as a money club. He (the President) then moved—"That the offer of amalgamation with this institute made by the South Midland Institute be accepted; that such of their members as are eligible and willing, after being approved by the council of this institute, shall be elected without entrance fee, their first subscription to be due from Jan. 1 next. All papers, transactions, and property to be given into the possession of this institute, which is to be free of all liabilities incurred by the South Midland Institute."

Mr. FLETCHER moved that the discussion be adjourned, and Mr. LATHAM seconded this.—Mr. ALEXANDER SMITH (the secretary) pointed out that the meeting was made special to consider the question.—Mr. PARTON was strongly in favour of a generous reception of the members of the South Midland. They would bring an equivalent in the way of intelligence to fully compensate for the 40s. entrance fees.—Several members here spoke in favour of an adjournment, so that the members desiring an amalgamation might receive a hearty and unanimous reception.

Mr. ALEXANDER SMITH said the Council had agreed to recommend the amalgamation. The South Midland had come to them in a friendly, manly manner, and they should be accepted on mutual terms. They would object to pay the fee on principle, because it would be an admission that their institute had utterly failed, and would really not be in a position to amalgamate. It would humiliate them and not exalt the stronger institute.—Mr. FIELD said the other institute would bring no property, and should be entered as ordinary members.

The PRESIDENT said if the amalgamation was not accomplished there was a party on the Walsall side anxious to have an institute, and they would make, if they had not made, overtures to the South Midland.—Mr. MUNRO said he could confirm this.—The resolution to adjourn was then carried.

Mr. PARTON moved the following resolution, which was suggested last month by the secretary:—"That ordinary and life members shall be persons practising as mining, civil, or mechanical engineers, and other persons connected with or interested in mining and engineering of whom the council may approve."

Mr. MUNRO seconded the resolution, which was carried unanimously.

Mr. MUNRO moved that Rule 11, which fixes Dudley as the place of meeting, should be relaxed so that Walsall and Wolverhampton might have meetings held for the convenience of members. After a long discussion, Mr. MUNRO agreed to leave the matter with the council of the Institute.—After a further discussion the consideration of Mr. Parton's interesting paper was adjourned.

#### A NEW CANAL PROJECT FOR BIRMINGHAM.

The Birmingham Chamber of Commerce monthly meeting was held on Wednesday, Oct. 20, at the secretary's office, the Exchange.—Mr. J. S. WRIGHT in the chair, and present Messrs. W. H. Blews, C. S. Hawkes, S. Timmins, and others. The ordinary business of the meeting having been disposed of,

The CHAIRMAN said a gentleman was about to be introduced to the meeting to show the advantage Birmingham would derive from having canal communication with the new coal fields in Leicestershire. They would hear what the gentleman had to say, but there could not be two opinions about its being very desirable for Birmingham to have access to every coal field, and every means of supply of this most important item of manufacture wherever it was possible for it to be obtained. They would hear what he had to say on the matter, and he only hoped that he might be able to give them some fair promise that Birmingham manufacturers would be able to obtain coal at a reduced price.

Mr. F. KING, surveyor, of London, the gentleman referred to, said he appeared there on behalf of Messrs. Burchell, parliamentary agents, and of Mr. E. Wilson, C.E., to ask the Chamber for its support before Parliament to a scheme for making a line of canal from near Poleworth, viz. Shuckstone, to the Coalville, Ilkeston, and Ellistown colliery districts. The idea, he said, was no new one, such a thing having been contemplated some 40 years ago, and was now rendered more than ever necessary, as the South Staffordshire coal fields approached exhaustion. Mr. Latham, the mining engineer for Earl Dudley, had told him that he had seen as many as 200 or 300 boats lying at Moira, some of them waiting as long as three months to be loaded. It had been proved beyond all question—not by borings, but by the sinking of shafts—that there were immense deposits of coal in Leicestershire, undoubtedly of the Moira strata, although not, perhaps, so easily accessible to that celebrated coal, but capitally adapted for manufacturing and household purposes. The immediate cause of his being before the Chamber was to ask its support to the application to Parliament, which, roughly estimated, would cost about 1800l. The colliery proprietors and canal proprietors had given in their adhesion to the scheme, and it was asked that they (the Chamber of Commerce), as representing the trade of Birmingham, would give their support to the scheme also.

There would be no difficulty, he apprehended, in finding the pecuniary support that would be necessary.

The CHAIRMAN asked if some idea could be given of the probable reduction in the price of coal that would be likely to ensue?

Mr. KING said he could not go so far, but in the district it was proposed to open up to Birmingham there were 30 pits already at work, or about to commence work, the yield being estimated at an output of 100,000 tons a week.

The CHAIRMAN said the difficulty, as it appeared to him, they were in was that neither themselves nor the Town Council had any fund that could be devoted to the purpose. It would seem to rest with individuals who were interested—those who owned the collieries, for instance.

Mr. KING pointed out that the proprietors already had a market on their other side, but if a market could be opened on the Birmingham side it would be a great argument for them to bring coals this way.

After some further discussion, the chamber, on the resolution of Mr. HAWKES, seconded by Mr. S. TIMMINS, decided that the scheme, if carried out, would be of great importance to the manufacturing interest of Birmingham, and was, therefore, worthy of substantial support.

#### REPORT FROM MONMOUTHSHIRE AND SOUTH WALES.

Nov. 3.—The extreme dullness of the weather during the week has added to that of the trade, and louder complaints are heard of the general depression which prevails. We have intimated for some weeks past that a general reduction in the wages rate was again forthcoming, and, therefore, we are not surprised that the following notice has been posted up at the Dowlais Ironworks:—

"In consequence of a scarcity of orders, the iron rolling-mills cannot be regularly worked, and this is, therefore, to notify to all contractors and others employed in the iron and mill of the Dowlais Iron Company that until notice to the contrary is given the contracts will be from day to day." Similar notices would, no doubt, be posted at the other works, but Dowlais happens to be the only one of the large ironmaking establishments in motion in the Merthyr district. There can be no doubt that the notice means a reduction in the wage rate, and the men accept it as such, but of course there is a good deal of speculation as to what the reduction will be. It has not transpired yet. The agents of the men accept it as notifying a reduction, but they make use of the fact the more to urge the men to join the Union, and to press upon the masters for the formation of a Conciliation Board for the iron trade. Whatever boards they form they are not likely to alter the state of the trade, nor the fact that the winter is likely to be a trying one to many. The tin-plate trade is in much about the same condition, and there is nothing new or encouraging to report.

The demand for coal does vary much just now. A tolerably good business is doing, though heavy continuous rains have prevented operations being carried on at times, both in and out of the pits; still the supplies are large, and amply meet requirements. Prices of some qualities are still tending downwards. The conciliation board continues to be a source of dissatisfaction. There is, no doubt, a good deal of anxiety felt as to what the result will be, and the fact that the business is conducted in private is irritating to some; but it should be remembered that it is rather early yet to expect that the board could have come to any determination as to the sliding scale which is to rule the wages rate. But it is urged that so much secrecy will tend to create misapprehension in the minds of the men as to what the committee are doing, and that epitomised statements should be made of the doing of each meeting. Then, again, the feeling is spread among the men that the fact that notices have been issued to the collieries that the day to day contracts will be adopted, indicates that the colliery proprietors are taking secret measures to strengthen their case before the sliding scale committee; therefore, it is more strongly urged that the proceedings of the committee should be made to some extent public.

The sinking of two new pits has just been completed at Tredegar. They were commenced by Mr. Evan Thomas, the contractor, in April last year, and it might be seen that the work has been carried out with expedition. No. 1 pit is 318 ft. in depth, and No. 2, 540 ft. They are called the Whitworth Pits, after the chairman of the company. It is understood that the other sinkings will be shortly commenced. On Wednesday the Messrs. Thomas and Griffiths, proprietors of the Tredegar and Gelly Collieries, in the Rhondda Valley, were charged with a breach of the Mines Regulation Act, with neglecting to properly fence the top, and all entrances between the top and bottom of their shaft of the Tynybedw Colliery, owing to which neglect a man was killed. There was no conviction, however, the magistrates being of opinion that the man killed had not made the best use of the means of safety provided.

The adjourned meeting of the Glamorganshire Canal shareholders was held on Wednesday at Cardiff, Mr. R. T. Crawshaw in the chair. The Chairman in an able and exhaustive statement detailed the causes of the falling off in the traffic of the canal, the main cause being the competition of the railways. In order to create new traffic for the canal it was proposed to extend and improve the sea-lock, so as to render it capacious enough to admit vessels of large tonnage. Coal staiths will also be erected, and other appliances provided for the more speedy and economical dispatch of traffic. To carry out these works it is in contemplation to form a new company to which will be leased the sea lock and a short length of the canal in addition. This new company will be in Parliament in the next session for the necessary powers, and it will also be proposed to construct a branch railway from the lock to the Great Western Railway on the western side of the canal. The new company will pay a sufficient rent, which, together with the increased traffic expected to follow on the canal, will give the old shareholders their accustomed 8 per cent. A resolution was passed at the meeting authorising the standing committee of the canal company to arrange the necessary terms with the new company.

The rumour that the Powell Duffryn Collieries are about to suspend operations proves to be groundless, the fact being that three of the pits are to be stopped on Nov. 30, and that the workmen and agents of these have, of course, received the necessary notice. The company, of which Sir George Elliot, Bart., M.P., the managing partner, is the largest coal concern in South Wales, its ten pits turning out from 1,000,000 to 1,200,000 tons annually.

**COAL AND IRON COMPANIES.**—Bilson and Crump (10s. paid), ½ to ¾ prem. Cardiff and Swansea (8s. paid), ¾ to ¾; Newport Abercrom (8s. paid), ¾ to ¾; South Wales Colliery (17s. paid), 3 to 4 prem.; Great Western (17s. paid), 1½ to 1½; Richards and Co. (6s. paid), par to ½ prem.; Ebbw Vale (2s. paid), 15 to 15.

#### THE SCOTCH MINING SHARE MARKET—WEEKLY REPORT AND LIST OF PRICES.

During the past week there has been a decided improvement in the amount of business transacted. In shares of iron and coal concerns, Bolekrow, Vaughan, A., has declined 2, and Ebbw Vale ½. Benhar (all paid) has improved ½, but new shares have declined 1-16th. Marbella and Monkland (ordinary) are each about ½ up, but the 7 per cent. guaranteed preference shares of the latter have fallen ½, at 5 to 5½. Omoa and Cleland has improved 8s., and Shotts new shares ½, at 5 to 5½. Andrew Knowles and Sons have improved, at 24 to 24½; Cairnbarrow, 10½ to 10½; Chapel House, 4 to 4½; Chillingworth Iron, 5, sellers; Scottish Australian, 26s. 6d. to 27s.; and United Bituminous, ½ to ½. In shares of copper concerns the principal business has been in Tharsis, which are 1½ lower for the week; the new shares also mark 9-16ths lower. Cape has risen ½, and Huntington are good at a rise of 3s. 6d. per share. Yorke Peninsula 16 per cent. guaranteed preference (interest on which are accumulative) have advanced at ½ to 1½. Home undertakings have been in better request, prices are Bedford United, ½ buyers; Cook's Kitchen, 7½, sellers; Drake Walls, 3½, sellers (a dividend of 2s. per share is expected at next meeting); East Caradon, 3, sellers; Elgar, 1, sellers; Glasgow Caradon (original), 28s., ditto new (15s. paid) shares, 18s.; Great Laxey, 15½ to 16; Gunnislake (Clitters) in demand at 2½; Marke Valley, 3, sellers; West Frances, 9½, sellers. West Maria has made a 2s. 6d. per share, and the call paid shares are firm at ½ to ½. The report of the North Hendre Lead Mining Company will be found referred to elsewhere. In shares of gold and silver mines, Emma and Last Chance shares are each ¾ lower, while Richmond has risen and Colorado Terrible Lode and Contino and Bolivia have come into good demand at 2½ and 27s. respectively. Signs of a revival in business in foreign mining shares are not wanting, when a rise in prices must undoubtedly ensue. There are many excellent undertakings selling far below their intrinsic value at present. Australasian Mines, ¼ to ½; Don Pedro, ¾, sellers; Rica, 3s. to 4s.; Malpas, 3s. sellers; New Rosario, 6s. 6d., sellers; and Santa Barbara (late Paris), 17s. to 19s. 6d. Young's Paraffin shares are fully ½ better, at 6½ to 6½. In miscellaneous little business has been done. Langdale's Chemical shares are easier at 8½. A detailed list of the several days' business follows:—

On THURSDAY last the business done was very small. Colorado Terrible, 2 to 2½; Drake Walls, 2 to 2½. Emma shares done at 30s., closing 29s. to 30s. Huntington, 26s. to 28s.; Killifreth, ¾ to ¾. Marbella shares done at 78s. 6d. Monkland (ordinary), 47s. to 49s.; ditto, 7 per cent. guaranteed preference, 5½ to 5½. North Cornwall Kaolin, ¾ sellers. Omoa and Cleland shares done at 58s. and 58s. 6d., closing 58s. to 59s. Richmond shares done at 7, closing 7 to 7½. Tharsis shares done at 19, closing 19½. Young's Paraffin shares done at 6½, closing 6½ to 6½. United Bituminous Collieries, ½ to ½.

On FRIDAY a larger business was done. Benhar (all paid) shares done at 10½; new shares 10 to 11½, closing 10½ to 11½. Bolekrow, Vaughan, A. shares lower, done at 49, closing 49 to 50; it is announced that the directors of this concern at Middleborough are likely to be closed, owing to the present depressed condition of the iron trade. Canadian Copper Pyrites shares done at 33s., closing 33s. to 33s. 6d. Drake Walls, 3½, sellers. Ebbw Vale shares done at 15. Emma shares lower, at 27s. to 28s., on the meeting being expected to be unfavourable. Glasgow Caradon shares done at 28s. Gunnislake (Clitters) 39s., buyers. Huntington shares done at 26s., closing 26s. 6d. to 26s. Killifreth, 18s. to 18s. Marbella shares done at 78s. 6d., closing 77s. to 78s. Marke Valley, 26s. to 3½. Monkland (ordinary) shares done at 48s. and 49s., closing 49s. to 50s. Omoa and Cleland shares done at 2½ to 3, closing 2½ to 3. Richmond shares done at 7½, closing 7½ to 7½, and were afterwards done at 8 and 7½, closing 8 to 8½. Santa Barbara (late Paris), 16s. 6d. to 17s. 6d. Shotts shares offered at 67½, Tharsis shares done at 19, but fell to 18½, and were afterwards done at 18½, closing 18½ to 18½. Young's Paraffin shares done at 6½, closing 6½ to 6½. Scottish Wagon new shares done at 86s. 6d.

On SATURDAY a small business was done. Benhar (all paid), done at 10½, closing 10½ to 11½; new shares, done at 5 16ths, closing 5 16ths to 5½. Colorado Terrible Lode, 2 to 2½. Drake Walls, 3, sellers. East Caradon, 1½, buyers. Ebbw Vale, lower, at 14½ to 15. Glasgow Caradon, 28s. to 29s. Gunnislake (Clitters), 1½ to 2. Glasgow Port Washington, done at 75s., closing 74s. to 75s. Huntington done at 26s., closing 26s. to 26s. Langdale's Chemical, lower, at 5½, sellers. Monkland, ordinary, done at 49s. and 50s., closing 49s. 6d. to 50s. 6d. Marke Valley, 2½ to 3½. Richmond, done at 8½, closing 8 to 8½. Tharsis opened at 18½, and declined to 17½, but were afterwards done at 17 16ths, closing 17 16ths to 17 16ths. Young's Paraffin, done at 6½, closing 6½ to 6½.

On TUESDAY a good business was done. Arnlston, done at 7. Bedford United, ½ buyers. Benhar (all paid), 10½ to 11; new shares, 5 16ths to 5½. Bolekrow, Vaughan, A., lower, at 49s. 6d., closing 49s. 6d. to 50s. 6d. Drake Walls, 3½, sellers. Ebbw Vale, 14½ to 15½. Glasgow Caradon, 28s. to 29s. Gunnislake (Clitters), 1½ to 1½. Gunnislake (Clitters) is in good demand at 3. Glasgow Port Washington, done at 3½. Huntington, good, at 1½ to 1½. Marbella, 78s. 6d. to

79s. 6d. Monkland, ordinary, done at 50s., closing 49s. to 50s.; 7 per cent. guaranteed preference, 5 to 5½. Omoa and Cleland, done at 58s., closing 58s. to 59s. Richmond, done at 8½, closing about 8. Shotts, new shares, 8 to 8 16th. Tharsis opened at 17½, but improved to 17 16ths, closing 17½ to 18; new shares done at 11½ and 11½, closing 11½ to 12. Young's Paraffin, done at 6½, closing 6½ to 6½. West Maria shares are now dealt in, call paid of 2s. 6d. per share, at ¼ to ½; new shares, as they are expected to be sufficient to open out at ¼ to ½; new shares, as they are now going to work on the Devon Great Consols Lode. Scottish Wagon, new shares, done at 86s. 6d.

On WEDNESDAY a good business was again done. Bedford United, ½ buyers. Benhar (all paid) done at 10½ and 11, closing 11 to 11½. Bolekrow, Vaughan, A. flat at 45 to 47. Cairnbarrow, 10½ to 10½. Canadian Copper Pyrites higher at 34s. to 35s. Cook's Kitchen, 7½, sellers. Chapel House Colliery, 4 to 4½. Colorado Terrible Lode, 2½, buyers. East Caradon, 3, sellers. Ebbw Vale done at 14½, closing 14½ to 14½. Frontino and Bolivia, 23s., buyers. Glasgow Caradon, 28s. to 28s. 6d. Huntington good, done at 1½, closing 1½ to 1½. Langdale's Chemical, about 6½. Last Chance remains at ½ to ¾; the ordinary meeting is called for the 4th inst. to receive the report of Marbella done at 78s. Marke Valley, 3, sellers. Monkland (ordinary) done at 49s. New Rosario, 6s. 6d., sellers. Omoa and Cleland done at 58s., closing 58s. 6d. to 59s. 6d. Richmonds opened at 7½, and declined to 7½, but were afterwards done at 7 16ths, closing 7½ to 7½. This week's cablegram from the mine says—"Week's run, \$11,000; re-lining; nothing new in mine; sinking shaft." Rica, 3s. to 4s. Santa Barbara (late Paris), 17s. to 19s. 6d. Scottish Australian done at 26s. 3d., closing 26s. 6d. to 27s. Tharsis opened at 15, and advanced to 18½, closing 18½ to 19½; new shares done at 12½, closing 12½ to 13½. Young's Paraffin, 6½ to 6½. Yorke Peninsula (ordinary), 6s. 6d. to 10s. 15 per cent. guaranteed preference better at ¼ to 1½. West Frances, 9½, sellers. West Maria, ¼ to ½.

North Hendre Lead Mining Company (Limited).—The reports and accounts of this company for the year ending Sept. 30, presented at the fifth ordinary general meeting on Oct. 29 ult., showed that the directors had paid an interim dividend on April 30 last, of 5 per cent., and a further dividend of 5 per cent. on the paid-up capital, has now been declared. This last distribution will absorb 1288l. 2s. 6d., leaving a balance of 77l. 3s. 7d. on revenue account, after writing off 30l. from previous year's expenses. The capital is 30,000l.; 12,000 shares of 2½. 10s. each, of which 1711 are unallotted, and form a reserve capital of 4277l. 10s. The others are issued and fully paid-up. The report of the resident captain on the present state and working of the mine is very satisfactory. He anticipates increased dividends, and the directors have undiminished confidence in the mine. With reference to the extracted, the amount was 417½ tons; of this 375½ tons realised 5688l., and there was in stock 42 tons.

The following are this week's prices of some stocks, shares, &c., occasionally dealt in on this market, but not quoted (with few exceptions) on any of the Scotch Stock Exchanges:—Iron, Steel, and Coal Companies: Andrew Knowles and Sons, 24 to 24½; Bolekrow, Vaughan, and Co. "B," 40 to 42; Britannia Ironworks, 10; Cardiff and Swansea Steam Coal, 3 to 3½; Chapel House Colliery, 4 to 4½; Great Western Colliery, 11 to 12; Lehigh and Wilkes Barre 6 per cent. first mortgage, guaranteed by Central Railroad of New Jersey (U.S.), 90¼ to 91¼; Llynvi, Tonty, and Mersey Coal and Iron, 23½ to 24½; Mersey Steel and Iron, 4½ to 5½; Myrny Iron Ore, 2; Newport Abercrom Colliery, 8½ to 9; New Shallowford Colliery, preferred, 4 to 4½; Powell's Llanwist Colliery, 1 to 1½; Scottish Australian Mining, preferred, 15 to 16; South Cleveland Ironworks, 2½ to 3; Ulverston Mining, 10½ to 11; United Bituminous Collieries, ½ to ¾; West Cumberland Iron and Steel, 8½ to 9½; Copper, Lead, Tin, &c., Companies: Bedford United, ½ to 1; Bensberg Lead, ¾ to ¾; Bowden Hill Manganese, ¾; Copiapo Mining, ¾; Court Grange Lead, ¾; Drake Walls, 3; East Caradon, 3½; Elgar, ¾ to 1; Great Laxey, 15½ to 16; West Van, ¼ to ½; Gunnislake (Clitters), 2 to 2½; Lady Constance Lead, ¾ to 1; Marke Valley, 3; New Consols, 1 to 1½; New Pembroke, ¾ to ¾; New Quabradra, ¾; North Hendre Lead, 3 to 4; Prince of Wales, 4s. to 5s.; Plympton Lead, ¾ to ¾; Rio Tinto, 6; Snowbrook, 4½ to 5; South Roskear, 4 to 5; West Escalier, 1½ to 1½; West Maria and Fortescue, ¾ to ¾; West Poldice, 1½; Wheel Mary Hutchings, ¾; Yorke Peninsula Mining 15 per cent. guaranteed preference, 1; Yorkshire Mining, 3-16ths to 3½. Gold and Silver Companies: Almaden and Tiritio, ¾ to ¾; Australasian Mines Investment, ¾ to ¾; Battle Mountain, 1 to 1½; Chontales Consolidated, ¾ to ¾; ditto new shares, ¾; Colorado Terrible Lode, 2½; Don Pedro North del Rey, ¾; Eberhardt and Aurora, 8½; Exchequer, ¾; Frontino and Bolivia, 1½ to 1½; L.L.L., 3; Royal, ¾ to ¾; Festarene United, ¾ to ¾; Port Phillip and Colorado, ¾ to ¾; Rica, 3s. to 4s.; Santa Barbara (late Paris), 17s. to 19s. 6d.; South Australia, 7-16ths; Tecoma, ¾; United Mexico, 2½; Welsh, "The," Gold, ¾; Winter's Freehold, 1 to 1½. Oil Companies: Flintshire Oil and Cannel, 1 to 1½; Midlothian, ¾; West Calder, 1 to 1½. Miscellaneous Companies: Aberdeen Lime, 7 to 8; Bede Metal and Chemical, 3½; Conglog Slate and Slab, 9½ to 10½; General Sewage and Manure, 4½ to 5½; Langdale's Chemical Manure, 5½; Law's Chemical, 7½ to 7½; Native Guano, 3; Newcastle Chemical, 3½ dis.; North Cornwall Kaolin, ¾ to 1; Phospho-Guano A, 7; ditto B, 2; Thames Chemical, 8; and subjoined are the latest prices, &c., of those quoted on the Stock Exchanges:—

Capital.	Rate per cent.	Description of shares.	Last price.
Per share.	Paid up.	Previous.	
£10	26	212½	£10
10	10	14	9
10	5	14	9
100	35	12½	12½
10	10	10	10
10	10	5	5
10	10	5	5
32	29	7	7
10	4	nil	nil
10	10	—	—
10	10	—	—
10	10	—	—
10	10	—	—
10	10	—	—
10	10	—	—
10	10	—	—
10	10	—	—
100	100	nil	nil
10	4	13	13
1	1	18	12½
80	50	10	5
10	8	10	5
10	8	10	5

Per share.	Paid up.	Previous.	Description of shares.	Last price.
10	7	—	Canadian Copper Pyrites (Limited)	24s.
10	10	—	Ditto All paid	6½
10	7	20s.	Cape Copper (Limited)	58
2	2	—	Dunsmuir Wheel Penitex Tin (Limited)	28s.
1	15s.	12½	Glasgow Copper Mining (Limited)	28s.
10	9	12½	Ditto New	18s.
25s.	23s.	—	Huntington Copper and Sulphur (Lim.)	1½
4	4	—	Kapunda Mining (Limited)	1½
10	10	—	Panulillo Copper (Limited)	1
10	10	—	Russian Copper (Limited)	18
10	10	25	Tharsis Copper and Sulphur (Limited)	18
10	7	25	Ditto New	12½
1	1	—	Yorke Peninsula Mining (Limited)	3

Per share.	Paid up.	Previous.	Description of shares.	Last price.
20	20	—	Emma Silver Mining (Limited)	28s.
10	10	—	Flagstaff Silver Mining (Limited)	1
5	5	—	Last Chance Silver Mining (Limited)	7½
5	5	—	Richmond Mining (Limited)	—

Per share.	Paid up.	Previous.	Description of shares.	Last price.
10	7	2½	Dalmeny Oil (Limited)	5½
10	10	—	Uphall Mineral Oil (Limited)	9½
10	8½	5	Young's Paraffin Light & Mineral Oil (L)	6½

Per share.	Paid up.	Previous.	Description of shares.	Last price.
50	25	16	London and Glasgow Engineering & Iron Shipbuilding (Limited)	22
20	11½	—	Peruvian Nitrate (Limited)	11½
10	10	8	Scottish Wagon (Limited)	10½
10	4	8	Ditto New	86 6d.

† Interim. ‡ Per share.

Last day for this account Nov. 9; settling day, Nov. 12.

NOTE.—The above list of mines and auxiliary associations is as full as can be ascertained, Scotch companies only being



### CORNWALL.

#### VALUABLE MINING SETTS, MACHINERY, AND PLANT, IN THE PARISH OF CONSTANTINE, FOR SALE.

**MR. CORFIELD** has been instructed to OFFER FOR SALE, BY PUBLIC AUCTION, on the Mine, on Tuesday, 9th November next, at Two o'clock in the afternoon, as a going concern (subject to such conditions as will then be read), the **WHOLE OF THE VALUABLE AND EXTENSIVE SETTS OF IRONSTONE, COPPER, TIN, AND OTHER MINERALS,**

situate at Calamassack and Inow, in the parish of Constantine, in the county of Cornwall, together with the **WHOLE OF THE EXCELLENT PLANT AND MACHINERY** thereon, comprising—

ONE valuable PORTABLE ENGINE, 18-horse power, by Barrows and Stewart, with winding gear attached; engine house and stand, balance bob, box, &c.; capstan shafts, shaft tackle and sheaves; all the pitwork, rods, pumps, &c.; steel wire rope, about 70 fms.; 70 fms. capstan chain, 40 fms. hemp rope, 70 fms. ladle, cable and winch, one dozen wheelbarrows, windlasses, launders and sheaves, cable and blocks, one dozen draw wagons, wheels, castings, stays, launder house, pit saw, wood house, roof, doors and windows of smiths' shop, smiths' bellows, 32 in.; anvil, forge, screw tools, boring machine, stamps, rod, bolts, &c.; loading planks, washing plate and floor, sawpit frame and smiths' tools, fire-brick, miners' tools, &c., in a great variety.

The sets are held upon favourable terms, are large in area, and comprise rich lodes of iron ore. They are most conveniently situated for import and export, being within a quarter of a mile of an excellent shipping port.

The property is capable of considerable development, and from the proof of the lodes of iron it seems to indicate, according to experienced miners, that these lodes will turn to copper lodes in greater depth, and, if so, the value of this property will be greatly enhanced.

For further information and to view, apply on the mine, to Capt. NOBLE; or to the Auctioneer, at his office, Market Street, Falmouth.

Dated Auction Office, October 22nd, 1875.

### NOTICE.

#### ST. IVES CONSOLS MINE, ST. IVES, CORNWALL.

**NO SALE OF THIS MINE HAVING BEEN EFFECTED** at the Auction held this day, the AUCTION was ADJOURNED until WEDNESDAY, the 10th day of November next, for Two o'clock P.M. on the mine. Dated 27th October, 1875. ALEX. BERRYMAN, Auctioneer, &c.

**TO BE SOLD (very cheap), a LARGE and VALUABLE COLLIERY, in DEAN FOREST, containing THREE HUNDRED AND FIFTY ACRES OF THE COLEFORD HIGH DEEP SEAM OF COAL.** For further particulars, price, &c., apply to "Z. A." Post Office, Coleford, Gloucestershire.

#### PINTOR PINDELLO COPPER AND FERRAL LEAD MINES.

**TO BE SOLD, BY AUCTION, in the Parish of Oliveira d'Azeiteira,** in the Kingdom of Portugal, on the 29th day of November next, in consequence of the inability of the company to find sufficient capital for the further prosecution of the works, and under conditions to be then and there mentioned, all the important MINES OF PINTOR PINDELLO and FERRAL, situated near the town of Oliveira d'Azeiteira, together with the valuable WATER WHEELS, PUMPING and other MACHINERY, PLANT, &c., recently put down, and a good working order.

The Pintor Mine, now opened to a depth of 110 metres, presents a series of strong copper pyrites lodes, all containing silver, whilst the Ferral Mine has two shafts sunk to a depth of 40 metres, more or less.

The appearance of both mines warrants the belief that ultimately large returns may be expected. Both mines are situated about eight miles from the Ovar Station of the Northern of Portugal Railway, and connected by it with the Port of Oporto, distant 20 miles.

Full particulars may be obtained from Mr. JOHNSON, Mining Engineer, Ferral, Oliveira d'Azeiteira, or at the offices of the company, 13, Pateo do Pimenta, Lisbon, September 28, 1875.

### PHOSPHATE QUARRIES.

**THE CONCESSIONAIRE OF 120 IMPORTANT and VALUABLE PHOSPHATE QUARRIES, near BORDEAUX, is READY TO TREAT FOR THEIR SALE.**

The quarries adjoining those now offered have been worked successfully for several years by English firms, who ship the phosphate to the English markets. For further particulars, &c., apply to Messrs. GABRIEL, HUGON, and Co., 73, Great Tower-street, London, E.C.

### TO MINE AND QUARRY OWNERS.

**FOR IMMEDIATE DISPOSAL, a QUANTITY OF BENNETT'S SINGLE TAPE AND GUTTA PERCHA FUSE, in good condition.** A liberal discount will be allowed on the whole. The above is in tin-lined cases, so is suitable for export. Address, "G. F.," 342, Messrs. Deacon's, Leadenhall-street, London, E.C.

### COPPER MINE FOR SALE.

**FOR SALE, a COPPER MINE, in FULL WORKING ORDER,** in one of the best districts in CORNWALL. Regular and profitable returns are made. Water charges easy. Proprietors are prepared to treat for the entirety or a part of the property. Apply, in the first instance, to "A. B.," Post Office, Redruth, Cornwall.

### THE HENDON SPELTER WORKS.

**TO CAPITALISTS, PROMOTERS OF PUBLIC COMPANIES, & OTHERS.** FOR SALE, in consequence of the death of the late Senior Partner, John Candlish, M.P., the SPELTER WORKS, situate at Hendon, in the borough of Sunderland, in the county of Durham, carried on under the style of "THE HENDON SPELTER COMPANY."

The works are situated within one mile of the well-known docks of the port of Sunderland, and adjoining the Hartlepool Branch of the North Eastern Railway, with which they are connected by high and low level sidings, and thereby placed in communication with all parts of the United Kingdom. Their position, within easy distance of both the ports of Newcastle and Sunderland, is very advantageous for the cheap importation of raw material, as also the forwarding of the manufactured article either by land or sea.

The ground on which the works are built can be either bought out or bought on a yearly perpetual ground rent, and any quantity under 20 acres can be included in the sale.

Being situated in the midst of the Durham Coal Field, one of the best descriptions can be obtained at a cost below almost any other part of the United Kingdom.

There are 19 workmen's cottages, which can be bought with the works. The works contain 24 zinc furnaces, capable of producing 70 tons of metal a week, as also calciners, polioths, machinery, blacksmiths' and joiners' shops, &c., of sufficient capacity for a much larger number. The works can, therefore, be doubled at a comparatively small cost.

The quality of the metal made at these works is well known, and it, therefore, commands a ready sale at the highest prices.

Attached to the high level sidings are large depots for coal, ore, &c. The goodwill would, of course, go with the works, and they will be sold subject to stock being taken at a fair market value.

The purchaser can also have the option of buying the CALCINING WORKS and VALUABLE MINES in SPAIN, thus allowing of the economical and regular supply of the raw material, and saving the mineowners' and merchants' profits.

As the ore from the South of Spain generally comes as ballast for ships laden with export, it has been brought for this company at an average cost of 7s. per ton, sometimes as low as 4s. 6d.

Further particulars can be had on application to the company.

#### CHINA CLAY AND TIN, COPPER, AND IRON ORES IN CORNWALL.

**THE LESSEE'S INTEREST in certain VALUABLE CHINA CLAY AND TIN WORKS, in full operation, and also in certain CHINA CLAY AND TIN, COPPER, AND IRON ORES SETTS in CORNWALL TO BE DISPOSED OF.**

Full particulars can be obtained on application to Mr. E. N. SCOTT, China Clay Merchant, St. Austell.

### MINERALS TO BE LET.

**TO BE LET BY TENDER, ALL THE MINERALS ABOVE AND INCLUDING THE No. 3 RHONDDA SEAM, lying under the several FARMS, called COED-Y-LAY, TYN-Y-COED, LLANLID, TYLOCH, WEN, GELLY, BEREN, and TON THRAETHOG, situate in the several parishes of LLANLID and LLANTRISANT, in the ELY VALLEY, GLAMORGANSHIRE, containing together by admeasurement 587 acres, or thereabouts.**

The property is most advantageously situated, being only distant 15 miles by the nearest route from the port of Cardiff, with which this property is connected by means of the Ely Valley Railway, running through the lands, and forming a junction with the Great Western Railway at Llantrissant, thus affording direct communication with all parts of the kingdom. The ports of Newport and Swansea are also easy of access by means of the above-mentioned route.

The Llantrissant and Taff Vale Junction Railway, which is now opened, runs within two miles of the property, and in conjunction with the Ely Valley Railway will greatly reduce the distance to Cardiff, and afford great facilities for the conveyance and shipment of the minerals to be worked from this property, which contains the whole of the mineral seams in the South Wales basin underlying the Llantrissant seam.

This mineral property, from its advantageous position, is the key to a very large area of minerals lying to the rise of a level course, and, being the only practicable outlet for such minerals, it will enable the same to be worked to greater advantage than from any other quarter, by means of which a large income will be obtained by the owners and lessees of this property in the shape of way leave to be paid by the adjoining lessees.

Full particulars and terms of letting can be had on application to Mr. HERBERT KIRKBRIDE, Mineral Engineer, Penryn Road, Merthyr, Glamorganshire; Messrs. SMITH, DAVIES, and Co., Solicitors, 1A, Frederick's-place, Old Jewry, London; or Messrs. DAVIES and Co., Solicitors, Haverfordwest.

**FOR SALE, BY PRIVATE CONTRACT, a 25 in. cylinder ROTARY ENGINE, with a 10 ton BOILER, iron stamps axle 18 heads, worked a very long time.**

Apply to Mr. RICHARD CLOGG, Liskeard.—Dated 29th October, 1875.

### In the Court of the Vice-Warden of the Stannaries.

#### Stannaries of Cornwall.

**IN the MATTER of the COMPANIES ACTS, 1862 and 1867, and in the MATTER of the LAMBERT MINING COMPANY (LIMITED).—**By an Order made by His Honor, the Vice-Warden of the Stannaries in the said Matter, dated the 27th day of October inst., on the Petition of the said company, IT WAS ORDERED that the said LAMBERT MINING COMPANY (LIMITED) should be WOUND-UP by the Court under the provision of the Companies Act, 1862. **HODGE, HOCKIN, AND MARRACK, Truro** Agents for George Davis, Morgan, and Co., 53, Moorgate-street, London, E.C. (Petitioners' Solicitors). Dated Truro, the 29th day of October, 1875.

### In the Court of the Vice-Warden of the Stannaries.

#### Stannaries of Cornwall.

**IN the MATTER of the COMPANIES ACTS, 1862 and 1867, and in the MATTER of the LAMBERT MINING COMPANY (LIMITED).—**The Vice-Warden has, by an Order made in the above Matter, bearing date the 27th day of October inst., APPOINTED JOHN HENRY HAMLEY, of Truro, within the said Stannaries, an Officer of the said Court, to be absolutely the OFFICIAL LIQUIDATOR of the above-named company. **FREDERICK MARSHALL, Registrar.** Dated Registrar's Office, Truro, October 29, 1875.

### In the Court of the Vice-Warden of the Stannaries.

#### Stannaries of Cornwall.

**IN the MATTER of the COMPANIES ACTS, 1862 and 1867, and in the MATTER of the LAMBERT MINING COMPANY (LIMITED).—**Notice is hereby given, that ALL CREDITORS of the above-named company are required, on or before the 18th day of November next, to SEND IN their NAMES and ADDRESSES, and the AMOUNTS and PARTICULARS of their SEVERAL CLAIMS, to JOHN HENRY HAMLEY, the Official Liquidator of the said company, at the Stannaries Court Office, in Truro, within the said Stannaries. **FREDERICK MARSHALL, Registrar.** Dated Registrar's Office, Truro, October 29, 1875.

### In the Court of the Vice-Warden of the Stannaries.

#### Stannaries of Cornwall.

**IN the MATTER of the COMPANIES ACT, 1862, and of the NORTH WHEEL CROFTY MINING COMPANY. TO BE SOLD, under the direction of the Registrar of the said Court, on Monday, the 15th day of Nov. inst., at Eleven o'clock in the forenoon, at the NORTH WHEEL CROFTY MINE, in the parish of Illogan, within the said Stannaries, in such lots as will meet the convenience of purchasers, and subject to such conditions as shall be then and there produced, the undermentioned**

**MINING PLANT, MACHINERY, MATERIALS, AND EFFECTS,** including ALL ORES at surface, belonging to the said company, and being within and upon the said Mine, including, with other effects—

ONE 80 in. cylinder PUMPING ENGINE, 9 ft. stroke, with FIVE 10 ton BOILERS; balance bob, with connection rod, complete; 142 ft. shears, with pulleys and stays; 1 10 arm oak axle capstan, with distant piece, complete; 220 fms. 10 in. capstan rope; cathead, 4 arms; 40 fms. chain; bell and stand; shaft tackle with pulley, stand, and stays, 57 ft.; 2 in. bucket rods; 4-wheel timber car, screwing machine, with pole and shaft; 40 head of stamps, crusher, &c., complete; ONE 24 in. WINDING ENGINE, with fly wheel; ONE 8 ton BOILER, and large winding case; and also the WHOLE of the PITWORK lately raised, and now lying at surface at the said Mine; the account house furniture, and numerous other articles and effects in general use in mines, and full particulars of which may be obtained on application to Mr. JOHN HENRY HAMLEY, the Official Liquidator of the said company, at the Stannaries Court Office, Truro; and for inspection of the said machinery, &c., to the Bailiff in charge at the Mine. **HODGE, HOCKIN, AND MARRACK, Truro** (Agents for Tufnell Southgate, 7, King's Bench Walk, London, Solicitors for the said Official Liquidator). Dated Stannaries Court Office, Truro, this 3rd day of November, 1875.

### In the High Court of Justice—Chancery Division.

#### IN THE MATTER OF THE COMPANIES ACT, 1862 AND 1867.

#### IN THE MATTER OF THE LIQUIRIA GOLD MINING COMPANY.

**NOTICE IS HEREBY GIVEN, that the Vice-Chancellor, Sir RICHARD MALINS, has fixed MONDAY, the 15th day of November, 1875, at Twelve o'clock at noon, at his Chambers, No. 3, Stone Buildings, Lincoln's Inn, in the county of Middlesex, as the time and place for the APPOINTMENT of an OFFICIAL LIQUIDATOR of the ABOVE-NAMED COMPANY.** **E. W. WALKER, Chief Clerk.**

**VALLANCE and VALLANCE, 20, Essex-street, Strand, and Lombard House, George-yard, Lombard-street (Petitioners' Solicitors).** Dated this 2nd day of November, 1875.

#### CRENVER AND WHEEL ABRAHAM UNITED MINES COMPANY (LIMITED).

#### IN LIQUIDATION.

**TO BE SOLD, BY AUCTION (by order of the Liquidators), by Mr. W. J. JOHNS, on Tuesday, the 30th day of November, 1875, at Two o'clock P.M., at the CRENVER and WHEEL ABRAHAM MINES, in the parish of Crowan, in the county of Cornwall, in One Lot, as a going concern, the WHOLE of these valuable and very extensive MINES, together with the**

**MINING PLANT, MACHINERY, MATERIALS, AND EFFECTS,** now being in and upon the said Mines, and comprising the following:—

STURTS' 90 in. cylinder CONDENSING ENGINE, with pitwork, boilers, &c. PELL'S 80 in. cylinder CONDENSING ENGINE, with pitwork, boilers, &c. WILLIAM'S 70 in. cylinder CONDENSING ENGINE, with pitwork, boilers, &c. STURTS' 30 in. cylinder CONDENSING WHIM ENGINE, with boiler, &c. PELL'S 30 in. cylinder CONDENSING WHIM ENGINE, with boiler, &c. WILLIAM'S 26 in. cylinder CONDENSING WHIM ENGINE, with boiler, &c. WOOLF'S 30 in. cylinder CONDENSING ENGINE, with boiler, &c. Pneumatic stamps, compound engine, with boiler, batteries, &c., rods, connections, plunger lift, pulley stands, tackle, &c., at the various shafts, steam hammer, screwing machine, self-acting fan, screw-acting table, drilling machine, circular saw, and other machinery and materials.

The sets are held under the various lords at moderate rents and dues, and full particulars of the same can be had on application.

Any further information can be obtained from ALFRED GOOD, Esq., the Joint Liquidator, New Poultry Chambers, 7, Poultry, London; W. P. CARDOZO, Esq., Camborne, Cornwall; from the Auctioneer; from WILLOUGHBY OAKES, Esq., Solicitor, 200, Piccadilly, London; or J. G. CHILCOTT, Esq., Solicitor, Truro, Truro, November, 1875.

#### NEW DALE MINE (LIMITED).

#### IN LIQUIDATION.

**IMPORTANT SALE OF VALUABLE MACHINERY AND MINING PLANT, AT WARSLOW, NEAR LEEK, STAFFORDSHIRE.**

**MESSRS. FERGUSON AND SON** have received peremptory instructions from the Liquidator to SELL, BY AUCTION, at the New Dale Mine, Warslow, near Leek, on Tuesday, the 16th inst., at One for Two o'clock prompt, the following

**COSTLY MACHINERY AND PLANT (without reserve):—**

ONE 40 in. PUMPING ENGINE; ONE 19 in. WINDING ENGINE; ONE 12 in. STEAM CAPSTAN; ONE CRUSHER; 50 pumps, 15 in. diameter, weight 40½ tons; 2 pole cases; 2 working barrels; 3 windbores; 4 door pieces; 2 H pieces; 2 stuffing boxes and glands; 9 10 in. pumps; 10 in. H piece and door piece windbore working barrel; 7 8 in. pumps, 8 in. matching; 10 lots rod plates; rod pins; door pins; 8 lots of staples and glands; 7 clack seats; 4 buckets; 2 in. rods; 3 sets of bevels and sundries.

The machinery is in first-class working order, and the materials of the best possible description.

For particulars, and all other information, apply to Mr. WM. WARD, Crosby House, London, the Liquidator; or to the Auctioneers, Leek. To view, apply to Mr. FRANCIS BURTON, on the Mine, Warslow, near Leek.

**IN VOLUNTARY LIQUIDATION UNDER THE COMPANIES ACT, 1862.**

**THE NEW LLANGYNOG LEAD MINING COMPANY (LIMITED).**

**TO BE SOLD, BY PRIVATE TREATY, ALL THE BENEFICIAL INTEREST of the New Llangynog Lead Mining Company (Limited) in the LLANGYNOG LEAD MINES, comprising all the valuable, productive, and extensive mines, veins, beds of lead, ores of lead, and other metals and minerals known collectively as the Llangynog Lead Mines, and in the reservoir, water-supply rights, easements, and interests thereto belonging, situate in the several parishes of Llangynog, Llanrhaidar-yn-Mochnant, Hiranant, and Pennant, in the county of Montgomery; and also the WHOLE of the movable PLANT and MACHINERY of the said company.**

The Llangynog Lead Mines have been a highly productive and dividend-paying property. The mines, machinery, and plant are in working order, and considerable quantities of ore are now being raised.

The works may be inspected at any time upon application to the Manager at the Mines. The leases and agreements may be inspected at the offices of Messrs. LONGUEVILLE, JONES, and WILLIAMS.

All further information may be obtained, and maps of the property inspected, on application to Messrs. GEO. HASWELL and SONS, 54, Foregate-street, Chester; to HENRY DENNIS, Esq., Mining Engineer, Hafod-y-Bwch, Ruabon; or to Messrs. LONGUEVILLE, JONES, and WILLIAMS, Solicitors, Oswestry.

### TO CAPITALISTS OR PROMOTERS DESIRING TO MAKE MONEY.

**TO BE SOLD, a COLLIERY ROYALTY in NORTH WALES, close to rail shipping port; several shafts partially sunk; coal fully proved of FOUR SEAMS of good HOUSE and STEAM COALS, in an area of upwards of 400 acres of surface. It adjoins the West Mostyn Coal Field, just successfully launched, where under seams (including Cannel) have been proved in addition to the above; so that eminent engineers state that the available coal in this royalty may be 50 feet thick.**

Present holder will arrange to sell the entire to an individual or company for what it has cost him, dividing all profit made above, which, even in a normal state of the coal trade, must be large. Certain and safe surveys by eminent Staffordshire and Welsh engineers have already been made. Address, "Nil Desperandum," care of Mr. Watson, 15, Fenwick-street, Liverpool.

### MACHINERY WANTED.—SECONDHAND SCREW-CUTTING LATHE, 8 to 10 ft. bed; TABLE ENGINE to work same; and CIRCULAR SAW BENCH, for 3 ft. saw.

Also, to HIRE—10 horse power PORTABLE ENGINE, with gear for pumping, at per month.

For particulars, apply to JAMES SECORRE, M.E., 9, Fenchurch-street, London.

### PORTABLE STEAM ENGINE FOR SALE, with two 13½ in. cylinders; also ONE with two 11½ in. cylinders, both with link motion reversing gear, and with or without gearing to wind and pump.

FOR SALE, a GOOD SECOND-HAND 6-horse power PORTABLE ENGINE, with a new 6-ft. pan motor mill.

To be seen at—**BARROWS AND STEWART'S WORKS, BANBURY.**

**FOR SALE, ONE PAIR of horizontal direct-acting double-action condensing PUMPING ENGINES, cylinders 35½ in. in diameter, 36 in. stroke, pumps 21½ in. in diameter, 36 in. stroke, fly wheel 14 ft. in diameter. About 12 tons; will lift 2800 gallons a minute about 150 ft. high. Have been very little used.**

For further particulars address, W. P. FRANCE, Priory Lodge, Peckham.

### LOCOMOTIVE TANK ENGINES.—

DOUBLE, 9 x 18..... £240.  
DOUBLE, 10 x 18..... 650.

Apply to—**S. LEWIN, POOLE, DORSET.**

### REDUCTION OF PRICES.

**PORTABLE ENGINES, ready for immediate delivery:—**

**SINGLE CYLINDER ENGINES. DOUBLE CYLINDER ENGINES.**  
7 h.p., with 9 in. cylinder. 9 h.p., with 2 7½ in. cylinders.  
8 h.p., with 9½ in. cylinder. 10 h.p., with 2 7½ in. cylinders.  
10 h.p., with 10½ in. cylinder. 12 h.p., with 2 8½ in. cylinders.  
14 h.p., with 2 9 in. cylinders.  
20 h.p., with 2 10½ in. cylinders.

**VERTICAL ENGINES, COMBINED WITH BOILERS:—2 h.p., 3 h.p., 4 h.p.** Prices and full particulars free on application.

**LEWIN, POOLE WORKS, DORSET.**

### CONDENSING AND NON-CONDENSING HORIZONTAL STEAM ENGINES, of the highest class, at low prices.

**PUMPING AND WINDING ENGINES. First-class references. ENGINEERS' TOOLS of all kinds, unrivalled for arrangement and general usefulness, at low prices. Inspection invited.**

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### RAILWAY CARRIAGE COMPANY (LIMITED).—

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Passenger carriages and wagons built, either for cash or for payment, over a period of years.

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**MANUFACTURE RAILWAY WAGONS OF EVERY DESCRIPTION, for HIRE and SALE, by immediate or deferred payments. They have also wagons for hire capable of carrying 6, 8, and 10 tons, part of which are constructed specially for shipping purposes. Wagons in working order maintained by contract.**

**EDMUND FOWLER, Sec. WAGON WORKS, SMETHWICK, BIRMINGHAM.**

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To all users of steam-power and others requiring machinery of any description this list will be found most useful, and for constant reference an invaluable guide to engineers, shippers, and public companies.

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**ENGINEERS, BRASS AND IRON FOUNDERS,**

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**MAKERS OF**

**CORNISH PUMPING, WINDING, AND STAMPING ENGINES; STEAM CAPSTANS AND CRUSHERS; WATER-WHEELS; PUMP-WORK; SHOVELS, AND HAMMERED IRON FORGINGS OF EVERY DESCRIPTION.**

Also of SPUR, MORTICE, MITRE, BEVIL, and other WHEELS, of any diameter up to 12 feet, made by Scott's Patent Moulding Machine, without the aid of patterns, and with an accuracy unattainable by any other means.

**MACHINERY or FOREIGN MINES carefully prepared.**

**SECONDHAND MINING MACHINERY, in good condition, always on sale moderate prices.**

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**THE ATTENTION OF GENTLEMEN AND ENGINEERS about to SEARCH FOR MINERALS or WATER is solicited to the METHOD provisionally protected by Mr. BOSWORTH. By this system continuous solid cones are brought to the surface without the use of percussion, or of a forced current of water—thus the sides of the bore are but little liable to damage, and a great saving of tubing thereby made.**

By permission of Sir A. B. C. BIKIE, Bart., and of C. S. BURNABY, Esq., the MACHINES MAY BE SEEN IN FULL WORK at MARKET BOSWORTH, and at EVINGTON, LEICESTER.

Application to be made to Messrs. ROLESTON and SOADY, 32, Piccadilly Circus, London, and Greyfriars, Leicester; or to—

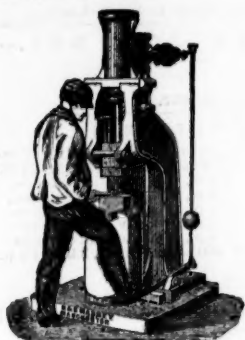
**Mr. J. A. BOSWORTH, HUMBERSTONE, LEICESTER.**



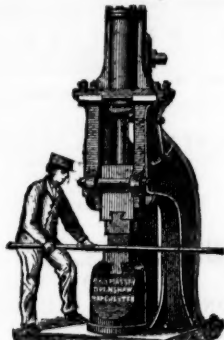
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PRIZE MEDALS Awarded:—Paris, 1867; Havre, 1868; Highland Society, 1870; Liverpool, 1871; Moscow, 1872; Vienna, 1873; Scientific Industry Society, 1875 Leeds, 1876.

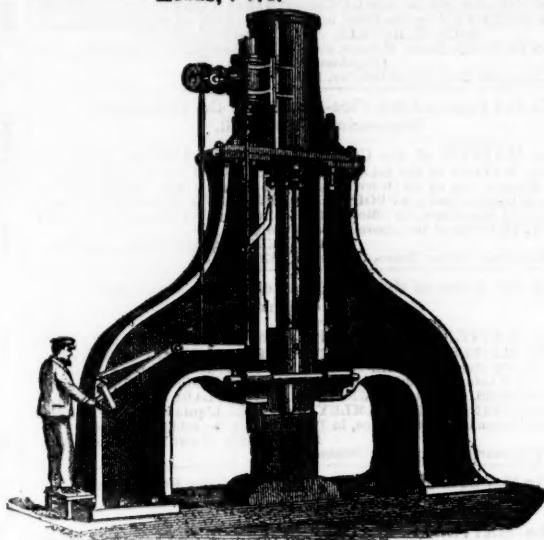
Patentees and Makers of Double and Single-acting STEAM HAMMERS of all sizes, from  $\frac{1}{2}$  cwt. to 20 tons, with self-acting or hand motions, in either case giving a perfectly DEAD BLOW, while the former may be worked by hand when desired. Large Hammers, with Improved Framing, in Cast or Wrought Iron. Small Hammers, working up to 500 blows per minute, in some cases being worked by the Foot of the Smith, and not requiring any separate Driver.



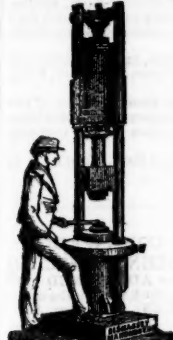
Hammer with Foot Motion.



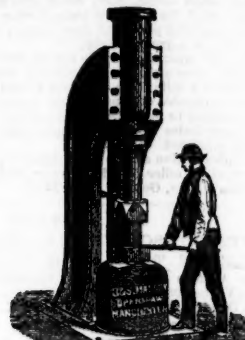
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General Smithy Hammer.

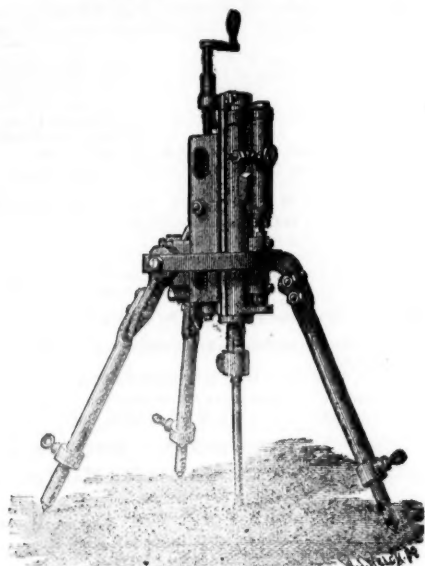
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SPECIAL STEAM STAMPS, for Forging, Stamping, Punching, Bolt-making, &c.

STEAM HAMMERS for Engineers, Machinists, Ship-builders, Steel Tilters, Millwrights, Copper-smiths, Railway Carriage and Wagon Builders, Colliery Proprietors, Ship Smiths, Bolt Makers, Cutlers, File Makers, Spindle and Flyer Makers, Spade Makers, Locomotive and other Wheel Makers, &c.; also for Use in Repairing Smithies of Mills and Works of all kinds; for straightening Bars, bending Cranks, breaking Pig-iron, &c.

## THE "CHAMPION" ROCK BORER.

For Tunnels, Mines, Quarries  
AND OTHER WORKS.



The "CHAMPION" Rock Borer has been designed after years of experience of other Rock Drills; it surpasses them in their good qualities, and avoids their imperfections, and while being of the very best make and material, it is absolutely the cheapest in the market. Intending purchasers can satisfy themselves of the excellence of this Rock Borer by seeing it in actual operation.

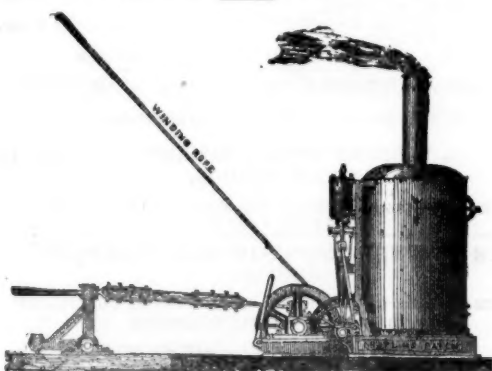
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CHAPLIN'S PATENT PORTABLE STEAM ENGINES FOR PUMPING AND WINDING. SPECIALLY ADAPTED FOR PITS, QUARRIES, &c. SIMPLE AND STRONG; require NO FOUNDATION or CHIMNEY STALK, and are EASILY ERECTED or REMOVED. Sizes, from 2 to 30-horse power.

Steam Cranes,  $1\frac{1}{2}$  to 30 tons, for railways, wharves, &c.; hoist, lower, and turn round in either direction by steam.

Stationary Engines, 1 to 30-horse power, with or without gearing.

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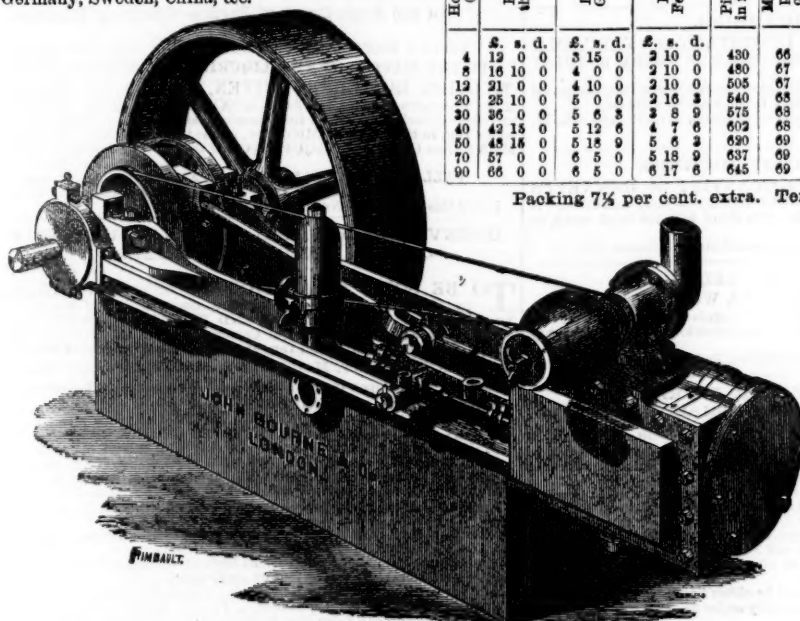
THE BEST AND CHEAPEST SMALL ENGINES MADE.

These engines have just been awarded a Silver Medal at the Manchester Exhibition, and about 1800 H.P. of them have been sold in a few months to North and South America, New Zealand, Australia, the Cape, Russia, Spain, Portugal, France, Germany, Sweden, China, &c.

### PRICES.

Horse power (actual).	Engine at the Works.	Extra for Governor.	Extra for Foot-Pump.	Piston speed in ft. per min.	Mean pressure per sq. in. on piston.	Tubular Boiler.	Extra for Mountings.
4	£ 12 0 0	£ 3 15 0	£ 2 10 0	430	66	£ 27 17 0	£ 10 10 0
8	£ 16 10 0	£ 4 0 0	£ 2 10 0	480	67	£ 35 8 6	£ 10 18 6
12	£ 21 0 0	£ 4 10 0	£ 2 10 0	505	67	£ 40 2 0	£ 11 18 0
20	£ 28 10 0	£ 5 0 0	£ 2 10 0	540	68	£ 47 18 0	£ 13 2 0
30	£ 36 0 0	£ 5 6 8	£ 3 8 9	575	68	£ 57 19 4	£ 15 13 0
40	£ 42 15 0	£ 5 12 6	£ 4 7 6	602	68	£ 70 9 0	£ 17 11 0
50	£ 48 16 0	£ 5 18 9	£ 5 6 3	630	69	£ 84 4 0	£ 18 2 0
70	£ 57 0 0	£ 6 5 0	£ 6 17 6	657	69	Two boilers.	
90	£ 66 0 0	£ 6 5 0	£ 6 17 6	685	69	Two boilers.	

Packing 7½ per cent. extra. Terms, Cash.



From ANDREW LAMB, Esq., Superintending Engineer, P. and O. Steam Co.

Peninsular and Oriental Steam Navigation Company, Southampton, March, 1875.

I have carefully examined your Patented High-Pressure High-Speed Steam-Engine. Knowing as I do how many improvements in the steam-engine you have inaugurated during the last forty years, which have been silently adopted and are now in general use, it does not surprise me that you have again made a happy hit, and brought out an engine which exactly meets one of the most pressing wants of the day. The speed and pressure of your engine are greater than is usual in other engines; but with a due proportion of rubbing surface, nothing in the way of undue wear is to be apprehended from the speed, and boilers and engines can easily be made strong enough to bear almost any pressure with safety. The indicator diagrams are very good, and they show that though the engine is small it generates the power. Your invention of balancing the momentum of the moving parts, already adopted in the best engines for steam navigation, enables engines to be run at almost any speed without inconvenience, if well constructed in other respects; and in your present engine you have embodied the best engineering knowledge of the age, with the addition of several features of originality and importance. While, then, the disadvantages of your engine are nil, its advantages are great and manifest. A high pressure and high speed render possible large expansion, with a great saving both in coal and water. Then the motion is more equable than in common engines, and the weight of machinery and the space occupied by it are small. The most remarkable feature, however, is the wonderful reduction of first cost which your system permits; and people will now have engines who before thought them quite beyond their reach. Their production, as I understand, you have reduced to a manufacture. To sum up the whole in a few words, you have, in my opinion, brought out a machine long wanted, and likely to produce a revolution in that class of engine, as it can be adapted for almost any purpose.

To John Bourne, Esq., C.E., Author of "A Treatise on the Steam-Engine," "A Catechism of the Steam-Engine," &c., &c.

Balanced Compounds for Pumping and Winding, for Mills, &c., equally moderate.

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The advantages possessed by these machines over others are—

- 1.—THE CHEAPNESS.
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- 3.—THE DURABILITY OF THE WEARING PARTS.
- 4.—THE QUANTITY OF STUFF PULVERISED.

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N.B.—Any person or persons infringing on the patent or manufacture of these machines, or any part thereof, will be prosecuted under the Act.

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Is the MOST ECONOMICAL and POWERFUL EXPLOSIVE for every kind of MINING and QUARRYING OPERATIONS; for blasting in hard or soft, wet or dry ROCKS; for clearing land of TREE ROOTS and BOULDER STONES; for rending massive BLOCKS of METAL; for SUBAQUEOUS and TORPEDO purposes; and for recovering or clearing away of WRECKS, &c.

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ARTHUR TUPMAN, 19, India-street, Edinburgh.  
JOHN DONALD, 24, Belmont-street, Aberdeen.  
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## BRITISH DIVIDEND MINES.

Shares.	Mines.	Paid.	Last Pr.	Clos. Pr.	Total divs.	Per share.	Last paid.
1500	Alderley Edge, c, Cheshire*	10 00	—	—	12 6 8.	0 50.	Jan. 1875
1000	Balmynthe, c, Wexham*	1 00	—	—	0 2 0.	0 20.	Nov. 1875
3000	Bampfyde, c, Devon*	1 00	—	—	0 2 0.	0 20.	June 1875
5000	Blaen Caelan, s, Cardigan* (24 sh.)	116 50	—	—	0 10 9.	—	—
200	Botalack, t, c, St. Just*	1 76	—	—	619 15 0.	5 00.	Aug. 1872
10000	Bronfod, s, Cardigan*	1 76	—	—	2 2 0.	0 0 6.	Jan. 1872
4000	Brookwood, c, Buckfastleigh*	1 16 0	—	—	3 10 0.	0 4 0.	July 1875
8348	Cargill, s, Newlyn*	5 13 0	—	—	4 16 3.	0 12 0.	Aug. 1875
5400	Cashwell, t, Cumberland*	2 10 0	—	—	1 9 6 0.	0 2 0.	Aug. 1872
1000	Carn Brea, c, t, Illogan*	35 00	—	—	308 00 0.	1 0 0.	Feb. 1874
8000	Cath. & Jane, t, Penrynheadraeth*	5 00	—	—	0 7 6 0.	0 7 6.	June 1873
2460	Cok's Kitchen, t, Illogan*	21 9 9	—	—	11 17 0.	0 7 6.	Jan. 1873
10240	Devon St. Consols, c, Tavistock*	1 00	—	—	116 10 0.	0 12 0.	May 1872
4296	Donkroth, c, t, Camborne*	10 14 10	—	—	107 6 8.	0 10 0.	Aug. 1875
5500	Drake Walls, t, c, Calstock*	6 0 0	—	—	0 2 1 1.	0 2 0.	Feb. 1874
10000	East Baleswidon, t, Sancreed*	1 00	—	—	2 0 0 0.	0 2 0.	July 1874
6144	East Caradon, c, St. Cleer*	2 14 6	—	—	14 19 0.	0 10 0.	Feb. 1874
800	East Daren, t, Cardiganshire*	32 00	—	—	230 10 0.	1 0 0.	Oct. 1872
4000	East Pool, t, c, Illogan*	0 9 9	—	—	13 18 3.	0 4 6.	Sept. 1875
1906	East Wheel Lovell, t, Wendron*	5 19 0	—	—	20 7 6 0.	0 7 6.	Oct. 1872
2000	Foxdale, t, Isle of Man*	25 00	—	—	81 15 0.	0 10 0.	Sept. 1875
10000	Glasgow Carr, c, [30,000 £1 p. 10,000]	18 5 p.	—	—	0 8 4 0.	0 1 0.	Sept. 1875
16000	Great Laxey, t, Isle of Man*	16 10 10	—	—	18 13 0.	0 10 0.	Oct. 1875
25000	Great West Van, t, Cardigan*	2 00	—	—	0 2 0 0.	0 2 0.	Aug. 1874
9008	Great Wheel Vor, t, c, Helston*	41 2 6	—	—	16 19 0.	0 1 0.	June 1872
6400	Green Hurth, t, Durham*	0 6 0	—	—	0 3 0 0.	0 3 0.	Oct. 1874
20000	Grogwinion, t, Cardigan*	2 00	—	—	0 8 9 0.	0 1 0.	Oct. 1875
9880	Gunnislake (Clitters), t, c	5 5 0	—	—	82 5 0.	0 15 0.	Oct. 1872
1024	Herdfoot, t, near Liskeard*	8 10 0	—	—	4 3 0 0.	0 5 0.	Nov. 1875
18000	Hingston Down, c, Calstock* (21 sh.)	2 5 0	—	—	0 3 11 0.	0 5 0.	Mar. 1875
25000	Killalee, t, Tipperary*	1 00	—	—	569 10 0.	1 0 0.	Sept. 1875
400	Lisburne, t, Cardiganshire*	18 15 0	—	—	0 17 6 0.	0 1 6.	Jan. 1874
5120	Lovell, t, Wendron*	0 10 0	—	—	0 8 0 0.	0 8 0.	Sept. 1872
11000	Melindur Valley, t, Cardigan*	3 00	—	—	0 7 2 0.	0 7 2.	Jan. 1875
5000	Minera Mines, t, Wrexham*	5 00	—	—	64 12 0.	0 2 0.	Sept. 1875
20000	Mining Co. of Ireland, c, t	7 00	—	—	0 8 0 0.	0 8 0.	Sept. 1872
15000	North Hendre, t, Wales*	10 00	—	—	1 2 6 0.	0 2 6.	Nov. 1875
2000	North Levant, t, c, St. Just*	12 20 0	—	—	4 13 0.	0 12 0.	Sept. 1873
27856	Old Trebrugg, s, ordinary shares	1 00	—	—	0 1 4 0.	0 1 4.	July 1874
9288	Old Trebrugg, s, (10 per cent. pref.)	0 10 0	—	—	0 5 0 0.	0 5 0.	July 1874
9580	Pedn-an-drea, t, Redruth*	9 17 0	—	—	0 5 0 0.	0 5 0.	July 1874
5000	Penhall, t, St. Agnes*	3 00	—	—	0 3 16 0.	0 2 0.	July 1875
45768	Penruth, t, c, Gwennap*	2 00	—	—	0 2 0 0.	0 2 0.	Nov. 1875
6000	Phonix, t, c, Llanidloes*	4 13 4	—	—	39 19 10.	0 4 0.	Nov. 1872
1712	Robert Agnes, t, c, Holywell*	15 00	—	—	1 12 6 0.	0 5 0.	Mar. 1872
18000	Prince Patrick, s, t, Holywell*	1 00	—	—	0 13 9 0.	0 1 3.	Oct. 1875
1120	Providence, t, Llanidloes*	2 00	—	—	104 12 0.	0 10 0.	Sept. 1872
2000	Queen's, s, Holywell*	2 00	—	—	0 2 0 0.	0 2 0.	Sept. 1874
12000	Roman Gravel, t, Salop*	7 10 0	—	—	0 1 0 0.	0 1 0.	Feb. 1872
10000	Rhett, c, t, St. Austell*	1 00	—	—	0 10 0.	0 10 0.	Sept. 1872
512	South Caradon, c, St. Cleer*	1 50	—	—	722 00 0.	0 2 0.	Feb. 1872
8000	South Caradon, c, St. Cleer*	2 13 6	—	—	0 10 0.	0 2 0.	Sept. 1872
8128	South Conduvor, t, c, Camborne*	6 5 6	—	—	1 12 6 0.	0 5 0.	Oct. 1875
4000	South Daren, t, Cardigan*	3 6 6	—	—	1 1 6 0.	0 1 6.	Nov. 1875
10000	So. Pr. Patrick, s, (8000 sh. issued)	1 00	—	—	0 8 0 0.	0 2 0.	Apr. 1875
8771	St. Just Amalgamated, s	3 10 0	—	—	0 9 0 0.	0 4 0.	Nov. 1871
12000	Tankerville, t, Salop*	6 00	—	—	4 3 0 0.	0 5 0.	Nov. 1875
4000	Tinctor, c, t, Pool, Illogan*	9 00	—	—	48 6 0.	0 5 0.	Aug. 1875
16000	Trefoil, t, t, Bodmin*	3 00	—	—	0 1 0 0.	0 1 0.	Mar. 1874
4000	Trumpet Consols, t, Helston*	7 10 0	—	—	0 11 0.	0 10 0.	Nov. 1872
15000	Van, t, Llanidloes*	4 6 0	—	—	15 18 0.	0 14 0.	Sept. 1875
12000	Tylywy, s, t, Cardigan*	1 00	—	—	52 17 0.	0 10 0.	Nov. 1875
8000	W. Chiverton, t, Perranzabuloe*	12 10 0	—	—	0 15 0.	0 7 0.	Aug. 1875
512	West Tolgus, c, Redruth*	95 10 0	—	—	0 15 0.	0 7 0.	Aug. 1875
5048	West Wheel Franches, t, Illogan*	27 8 9	—	—	3 12 6 0.	0 5 0.	Oct. 1875
512	Wheel Basset, t, Illogan*	5 2 6	—	—	688 10 0.	10 0 0.	Aug. 1872
2048	Wheel Jane, t, c, Redruth*	2 13 0	—	—	11 5 0.	0 5 0.	July 1875
4296	Wheel Kitty, t, St. Agnes*	8 4 6	—	—	11 19 0.	0 5 0.	Dec. 1874
800	Wheel Margaret, t, Uney Llanidloes*	15 17 6	—	—	82 3 0.	0 10 0.	May 1872
80	Wheel Owles, t, St. Just*	160	—	—	522 10 0.	4 0 0.	Aug. 1872
6000	Wheel Prussia, t, Redruth*	2 00	—	—	0 1 0 0.	0 1 0.	Dec. 1874
12000	Wheel Russell, c, Tavistock*	1 00	—	—	0 1 6 0.	0 6 0.	Nov. 1874
10000	Wheel Whisler, t, c, Warleggan*	1 00	—	—	0 1 6 0.	0 6 0.	May 1872
25000	Wicklow, c, s, t, Wicklow*	2 10 0	—	—	52 9 0.	0 2 6.	Mar. 1872
10000	Wye Valley, t, Montgomery*	3 00	—	—	0 6 0 0.	0 3 0.	Aug. 1875

## FOREIGN DIVIDEND MINES.

Shares.	Mines.	Paid.	Last Pr.	Clos. Pr.	Total divs.	Per share.	Last paid.
85000	Almaden, t, Spain*	2 00	—	—	1 9 9 0.	0 2 0.	Sept. 1875
30000	Almaden and Tinto Consols, s*	1 00	—	—	0 5 3 0.	0 10 0.	Mar. 1875
10000	Australian, c, South Australia*	7 7 6	—	—	0 15 6 0.	0 3 0.	July 1875
10000	Battle Mountain, s, (6240 pref. pd.)	6 00	—	—	0 10 0.	0 10 0.	Nov. 1872
15000	Birdseye Creek, c, California*	4 00	—	—	0 14 0.	0 2 6.	June 1874
6000	Bensberg, t, Germany*	10 00	—	—	17 14 0.	0 8 0.	July 1875
12250	Burra Burra, c, So. Australia*	5 00	—	—	21 15 0.	0 10 0.	Oct. 1872
30000	Cape Copper Mining, t, So. Africa*	7 00	—	—	0 5 0 0.	0 5 0.	Sept. 1875
40000	Cedar Creek, c, California*	5 00	—	—	0 6 0 0.	0 1 0.	June 1873
80000	Central American Association, t	0 16 0	—	—	0 6 0 0.	0 1 0.	July 1869
15000	Chicago, s, Utah*	10 00	—	—	0 12 0 0.	0 4 0.	Jan. 1875
31000	Colorado Terrible, s, Colorado*	5 00	—	—	0 13 6 0.	0 4 0.	Jan. 1875
100000	Don Pedro Norte del Rey*	0 16 0	—	—	2 5 9 0.	0 3 0.	Mar. 1872
35000	Eberhardt and Aurora, s, Nevada*	10 00	—	—	1 0 0 0.	0 1 0.	July 1871
50000	Emma, s, Utah*	20 00	—	—	3 12 0 0.	0 6 0.	Dec. 1872
10000	English and Australian, c, So. Aust.	2 10 0	—	—	2 10 0.	0 2 6.	Mar. 1875
15000	Ferguson, c, California*	3 00	—	—	0 3 0 0.	0 3 0.	April 1872
30000	Flagstaff, s, Utah*	10 00	—	—	4 2 0 0.	0 5 0.	July 1873
30000	Fortuna, t, Spain*	2 00	—	—	5 0 10 0.	0 6 0.	Sept. 1875
30000	Gold Run, s, Utah*	1 00	—	—	0 2 4 0.	0 4 0.	Oct. 1872
80000	Kapunda Mining Co. Australia*	1 00	—	—	0 14 0.	0 2 0.	June 1873
20000	Last Chance, s, Utah*	1 30	—	—	15 4 2 0.	0 2 0.	July 1873
15000	Llanes, t, Spain*	5 00	—	—	0 10 0.	0 1 0.	Sept. 1875
7887	Llanidloes, t, c, Cornwall*	2 00	—	—	11 1 6 0.	0 1 6.	Mar. 1873
5000	Mammoth Copperopolis of Utah, c, s	8 10 0	—	—	0 5 0 0.	0 5 0.	Dec. 1872
5000	Mountain Chief, s, Utah*	10 00	—	—	0 4 0 0.	0 4 0.	Jan. 1873
18000	Prussian Mining & Ironworks, c, t	30 00	—	—	6 0 0 0.	0 3 0.	June 1873
10000	Pontgibaud, s, France*	20 00	—	—	19 11 0.	0 11 0.	July 1873
100000	Port Phillip, c, Clunes*	30 00	—	—	1 0 0 0.	0 1 0.	Jan. 1874
54000	Richmond Consols, s, Nevada*	1 00	—	—	2 14 0.	0 7 6.	May 1875
12000	Scottish Australian Mining Co. t	1 00	—	—	12 1/2 per cent.	—	May 1875
40000	Sierra Buttes, c, California*	2 00	—	—	0 12 0 0.	0 2 0.	Oct. 1875
40000	South Aurora, c, Nevada*	5 00	—	—	20 p. of 2 1/2 per cent.	—	June 1875
250000	St. John del Rey (25 stock and multiples dealt in)	350 410	—	—	3 2 0 0.	0 2 0.	Sept. 1875
16000	Sweetland Creek, t, California*	4 00	—	—	0 11 6 0.	0 6 0.	May 1874
20000	Timba, s, (6000 sh. are 25 p. pd.)	4 10 0	—	—	0 13 0 0.	0 8 0.	Sept. 1875
15000	Western Andes, s, New Granada*	5 00	—	—	—	—	—

## NON-DIVIDEND FOREIGN MINES.

Shares.	Mines.	Paid.	Last Pr.	Clos. Pr.	Total divs.	Per share.	Last paid.
30000	Anglo-Australian, c, Victoria*	2 10 0	—	—	—	—	—
10000	Argentine, c, Argentine Republic*	5 00	—	—	—	—	—
30000	Belavista, s, Peru* (210 shares)	5 00	—	—	—	—	—
30000	Blue Rent, s, t, Australia*	5 00	—	—	—	—	—
30000	Braganza, c, Brazil*	5 00	—	—	—	—	—
12000	Camp Flore, s, Brazil*	0 16 0	—	—	—	—	—
25000	Cesena Sulphur Company, Romanga, Italy*	10 00	—	—	—	—	—
60152	Chontales, c, s, Nicaragua* (and 12,542 of £1 ls.)	10 00	—	—	—	—	—
6000	Clifton, s, Colorado*	2 00	—	—	—	—	—
10000	Crescent, c, Plumas County, California*	5 00	—	—	—	—	—
10000	Douglas, s, Georgetown, Col.	10 00	—	—	—	—	—
5000	Excelsior Hydraulic Gold Washing Co., California*	5 00	—	—	—	—	—
60000	Exchequer, c, s, California*	6 00	—	—	—	—	—
50000	Frontino and Bolivia, c, New Granada*	1 00	—	—	—	—	—
10000	General Brazilian, s*	2 00	—	—	—	—	—
10000	Goetzsche Tunnel Co., Georgetown, Col.	1 00	—	—	—	—	—
40000	Holcombe Valley, c, t, California*	7 00	—	—	—	—	—
10000	Hornachos, c, t, (210 shares) Spain	10 00	—	—	—	—	—
30000	Imperial Brazilian Collieries, Brazil*	5 00	—	—	—	—	—
10000	Independence, c, California*	5 00	—	—	—	—	—
50000	I. X. L., s, California*	5 00	—	—	—	—	—
50000	Javali, c, Nicaragua*	5 00	—	—	—	—	—
12000	Lanestosa, s, t, Viscaya, Spain (22 shares)	2 00	—	—	—	—	—
75000	Malabar, c, Colombia* (55000 issued)	1 12 6	—	—	—	—	—
4000	Malaga, t, Spain*	1 00	—	—	—	—	—
40000	Malpaso, c, Colombia* (10000 pref. shares, fully paid)	10 00	—	—	—	—	—
12000	Menzenberg, c, Honnef, Germany*	5 00	—	—	—	—	—
6000	Monte Loreto, c, Italy*	5 00	—	—	—	—	—
15000	New Pacific, c, Nevada*	5 00	—	—	—	—	—
60000	New Quebec, c, Venezuela*	0 10 0	—	—	—	—	—
50000	New Rosario, c, Venezuela*	0 10 0	—	—	—	—	—
20000	New Zealand Kapanga, c, Coromandel*	5 00	—	—	—	—	—
10000	Newfoundland, s*	1 00	—	—	—	—	—